

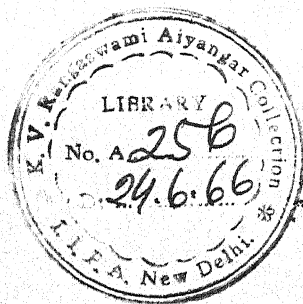
BIMETALLISM

A SUMMARY AND EXAMINATION OF THE
ARGUMENTS FOR AND AGAINST A
BIMETALLIC SYSTEM OF
CURRENCY

COMPUTED

BY

MAJOR LEONARD DARWIN



LONDON
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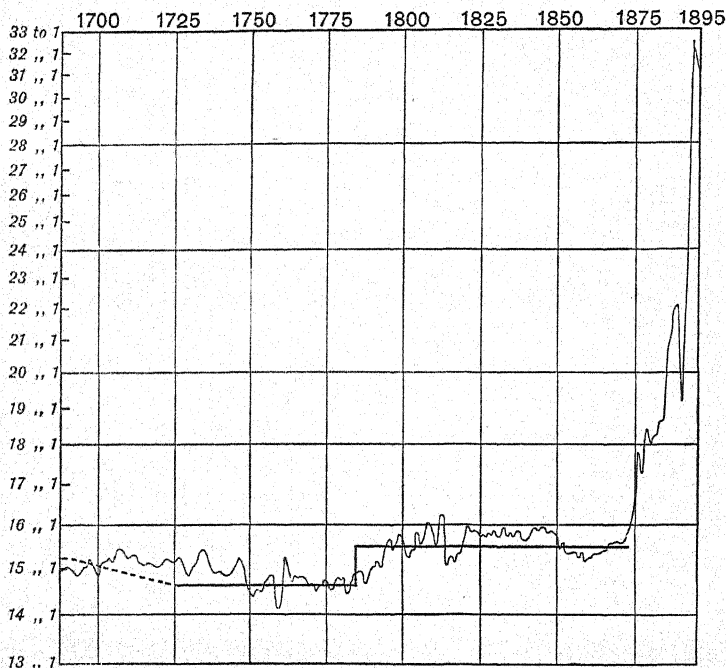
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PREFACE.

My thanks are due to Mr. Alfred Marshall, Professor of Political Economy in the University of Cambridge, and to Mr. H. S. Foxwell, Professor of Political Economy at University College, London, for the very kind way in which they have answered my inquiries on the subjects here discussed; also to Mr. W. E. Darwin, Major-General T. Fraser, and Dr. R. H. Mill for kindly assisting me in the revision of the proofs.

October, 1897.

DIAGRAM SHOWING THE RELATIVE VALUES OF
GOLD AND SILVER BETWEEN 1687 AND 1895.



NOTE.—The curved line shows the ratio in the market. The straight line shows approximately the legal ratio in France, without reference to seigniorage; it has not been found possible to plot this line between 1689 and 1726. The French legal ratio is shown because it was the last to be abolished; the legal ratio adopted by other nations in the eighteenth century frequently differed from the French ratio. The information from which this table was compiled was taken, almost without exception, from the Report of the Director of the Mint of the United States, and from Shaw's "History of Currency." The ordinates are logarithms of the ratios; that is to say, that the ratio of 32 to 1 is as much above the ratio of 16 to 1 as the ratio of 16 to 1 would be above the ratio of 8 to 1.

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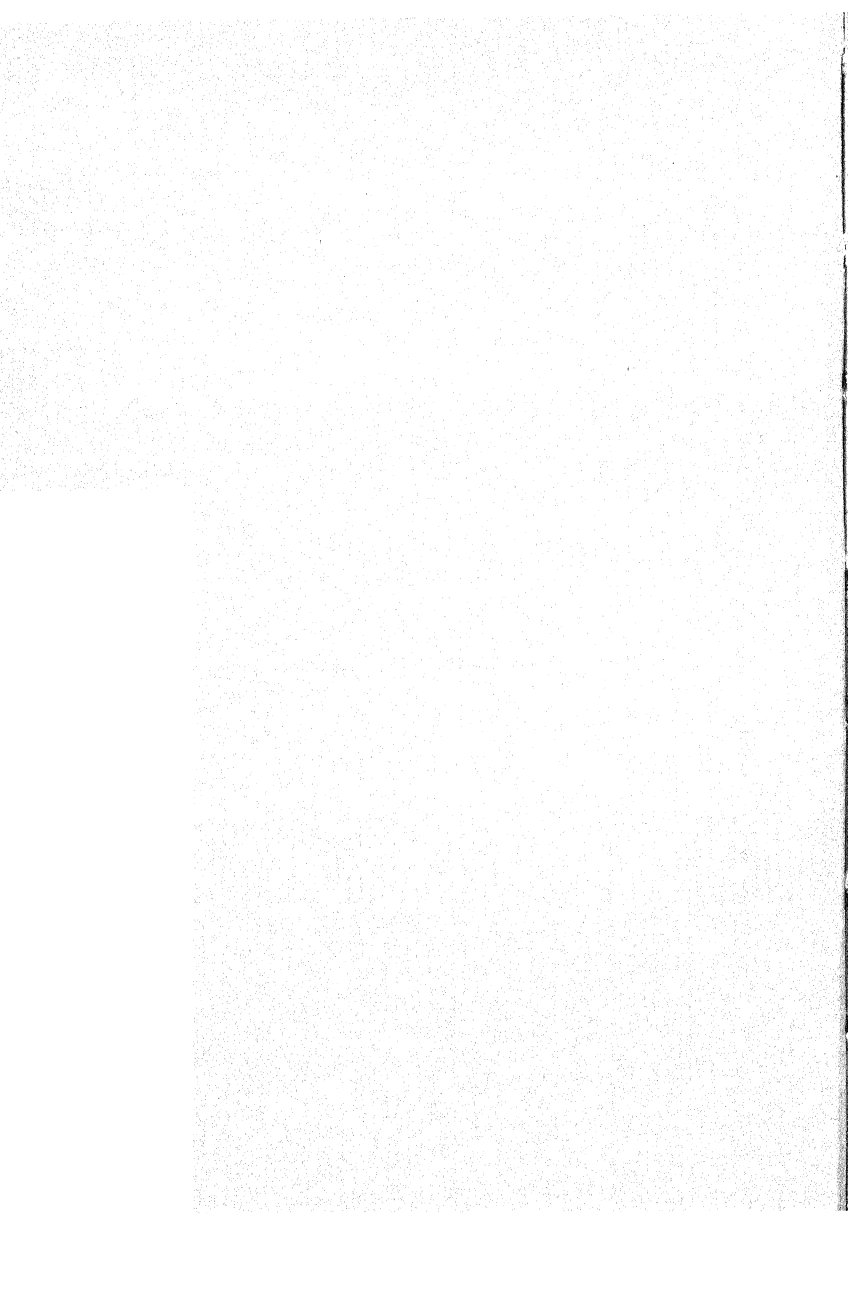
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THE BIMETALLIC THEORY.



BIMETALLISM.

CHAPTER I.

CAN THE RATIO BE MAINTAINED?

THE members of the Gold and Silver Commission, in the first page of their Report, declared that from the commencement of their inquiry they were “profoundly impressed with the extreme complexity of the questions submitted for” their consideration.¹ If the difficulty of mastering these currency problems was so keenly felt by this exceptionally able body of commissioners, no one ought to expect to be able to understand the subject without careful study. There are some inquirers who apparently hope to be in a position after a few hours’ work to form a definite opinion as to whether a bimetallic system ought or ought not to be adopted; but if any reader should open these pages in that spirit, I hope he will close

All questions connected with currency are very difficult to master.

¹ Gold and Silver Commission. Final Report of the Royal Commission appointed to inquire into the recent changes in the relative values of the precious metals, 1888, p. 1.

them again without reading another line. I myself have found the path of inquiry so strewn with difficulties, many of them apparently insurmountable, that I cannot pretend to point out a royal road to a quick and certain decision. At the best, all I can hope to do is to give an outline of the main arguments which ought to be weighed by those who desire to form an independent judgment.

What is attempted in this volume is to give a summary of the arguments on both sides ;

There are two methods of bringing such an essay as this within moderate dimensions ; the one is to sketch lightly, or omit, all but the main arguments, relying rather on the assertion of the conclusions arrived at by the author ; the other is, whilst endeavouring to state fairly all the main arguments on both sides, to condense them very greatly. The former of these methods, no doubt, has its advantages, but the latter plan has been adopted here, although it naturally makes the task of reading these pages more severe. When I approached this subject with an open mind a few years ago, I felt the want of such a summary and examination of the arguments for and against a bimetallic system, and I hope, therefore, that my labours may be of some use to others under similar circumstances.

whilst the ground-work of facts will not be discussed at great length.

The true or alleged recent depression in trade, the variation in the relative value of the precious metals during the last twenty years, and the causes to which these occurrences are due, are questions which have occupied much of the attention of bimetallicists. These subjects will not be discussed at any great length, for it is rather with the

principles which should be present in the minds of those who are desirous of considering the facts for themselves that I shall attempt to deal.

The word "bimetallism"¹ is now well understood, but, as it is a somewhat misleading phrase, it may be as well to commence by clearly stating what is the meaning here attached to it. The adoption of bimetallism in this country would entail such an alteration in the law as would permit any one who now owes a certain weight of coined gold—a certain number of pounds sterling—to discharge that debt, *either* by paying the said weight of coined gold, *or* by paying a proportionately larger weight of coined silver, the ratio between the two weights being enacted once for all on the establishment of the system. Or, to put the matter more generally, bimetallism means any currency system which would establish a right on the part of the debtor to discharge his liabilities at his option in either of the two metals at a ratio fixed by law. A system of bimetallism in which the option was given to the creditor as to the metal in which the payment might be made would be impracticable, because (amongst other reasons) giving that option to the creditor instead of to the debtor, would necessitate all debtors,

Definition
of bimetal-
lism.

¹ The *symmetallic* system is not discussed in this volume, for, though probably theoretically preferable to bimetallism, it does not appear to me to come within the region of practical politics. This system, which was proposed by Professor Alfred Marshall, would enable the Government to issue certificates, each certificate representing a sum of gold *and* a sum of silver, the ratio between the two being fixed internationally.

including banks, keeping nearly twice as much coin in hand as they do now—one reserve of silver and the other of gold—if they were always to be in a position to meet their liabilities with the same degree of certainty as at present. It is a necessary part of the bimetallic system that the leading commercial nations of the world should adopt it, fixing on the same ratio, and that they should allow their mints to be open, without restrictions as to quantity, to all who desire to have either metal coined. The term “bimetallism,” as thus defined, gives no indication as to what the ratio may be.

The
primary
objection
to bimetal-
lism is that
the ratio
cannot be
maintained.

The objection most commonly urged in the press, and in conversation, against the adoption of bimetallicism is that it is impossible to alter by law the value of any material, because value depends on inherent qualities outside the scope of legislative power.¹ In considering the efficacy of bimetallic laws, many of us may think it wisest to base our opinions largely on the authority of others more capable of judging than ourselves, and, if that be the case, we

¹ This is in part due to a confusion between two meanings of the word “value.” “The word ‘value,’” says Adam Smith, “has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called value in use, the other value in exchange.” In the place of “value in use” we now speak of “utility,” while instead of “value in exchange” we often say “exchange value” or simply “value.” “Value” by itself always means value in exchange. (Marshall’s “Principles of Economics,” p. 8.) The “money value” of a sum in currency merely indicates the number of units—pounds or dollars—which it contains.

cannot do better than consult the Report of the Gold and Silver Commission, the members of which originally consisted of an equal number of monometallists and bimetallicists. They unanimously reported that they were "irresistibly led to the conclusion that the operation of" the bimetallic system of the Latin Union, which existed in full force until 1873, had "exerted a material influence upon the relative value of the two metals."¹ This statement, if accepted as final, completely destroys the idea that it is impossible to alter the relative values of the metals by law; and the only outstanding question is whether the forces which are admitted to have existed in the past, would in the future be sufficiently powerful, if international bimetallicism were adopted, to maintain the selected ratio between the value of gold and silver coins with sufficient accuracy to enable them both to circulate in the currency at the same time and place. Of course the bimetallicist members of the Commission declared that this was possible, and even the monometallists admitted "that in any conditions fairly to be contemplated in the future, . . . a stable ratio might be maintained if" the United Kingdom, Germany, the United States, and the Latin Union "were to accept and strictly adhere to" bimetallicism at a ratio approximating to that now obtaining in the market.² Sir John Lubbock and Mr. Birch, however, though signing the Report, expressed their grave doubts as to this paragraph,

Authorities favourable to the view that value can be altered by law are quoted.

¹ Final Report, pp. 58, 59.

² Ibid., p. 85.

but did not "deny that such a combination might for a considerable time be able to maintain the ratio adopted."¹ In fact, as ten out of the twelve commissioners considered that the ratio might be maintained, the two remaining members only doubtfully dissenting, the majority of the most powerful jury that has ever sat on this question may be said to have given their verdict in favour of the practicability of bimetallism in this respect.

Historical arguments for and against the belief that bimetallic laws were effective when in existence.

The commissioners arrived at the above conclusions "as well from *a priori* reasoning as from the experience of the last half century." As for historical proofs, a diagram has already been given showing the relative value of the metals in the open market for about two centuries, which helps to illustrate the points at issue. Bimetallic laws were in force in various parts of Europe during the whole of the period included in the table up till the year 1873; in that year, France, and the other countries composing the Latin Union, commenced the abandonment of their bimetallic system; and after the completion of that movement, Europe and America passed into a period of pure monometallism for the first time in history. Coincidentally with this change, or nearly so, there began the most extraordinary fall in the gold price of silver, and bimetallists declare that this fall was due to the untying of the legal bonds which held the two metals together. Against this view, monometallists argue that the fall began a year or two before the legal

¹ Final Report, p. 93.

changes of 1873, and that the bimetallic tie in reality broke down under the excessive strain of natural forces. Bimetallists reply that there is every reason to believe that as great or greater strains had been successfully resisted in the past;¹ and that the small fall which occurred before 1873 is accounted for, both by the apprehensions which were felt as to the anticipated changes in the law, and also by the monetary troubles in France, the chief bimetallic nation, which made her influence on the relative value of the metals less effective. Monometallists also call attention to the fact that the ratio was not accurately maintained in the past by the bimetallic laws, and that there is, therefore, no reason to believe it would be maintained in the future. To this contention bimetallists reply that these ancient bimetallic laws were of a very imperfect kind, and that the countries adopting them did not constitute a wide enough area to make them thoroughly effective; they also point out that tables and diagrams always indicate the relative value of gold and silver *bullion* in the market, and not the ratio of the value of the *coined metals*, which is the really important matter; and that from various causes coin and bullion may differ in value, to a limited extent, one from the other. In countries where there is a charge made at the mint for coining, it will be seen, in a later chapter, that the value of bullion may be either

¹ See tables in the Appendix showing the relative production of the precious metals.

higher or lower than the value of same weight of pure metal in coins.¹ Even in England, the value of gold bullion and the value of gold in sovereigns is not always identical; because the purchaser of bullion is sometimes willing to pay a small "agio" to the vendor for the trouble of collecting and melting down the sovereigns, and for the loss on account of their being light in weight. Moreover, the prices in the English and German markets form an uncertain guide as to the ratio of the value even of bullion in France, because the cost of transportation of the metals make it possible for a permanent difference between the ratios in different places to be maintained. These considerations show that it is, at all events, quite possible that the relative value of silver and gold bullion before 1873 might have varied slightly in France, and still more in England, without there having been any corresponding variation in the relative values of the Latin Union coins; and bimetallists assert that this was actually the case. In my opinion, the bimetallists have the best of the argument in this historical controversy, the details of which cannot be given here at length.

¹ See p. 136.

CHAPTER II.

THE THEORY OF THE MAINTENANCE OF THE RATIO.

BEFORE discussing the arguments which have led economists to the conclusion that a suitable ratio between the metals can be maintained, some idea must be given of the theory of the value of money.

The theory of the value of money must first be considered.

It will in the first place be convenient to consider the case of a country under purely hypothetical conditions. Let us assume that it is quite isolated from all surroundings; that it has an inconvertible note currency; that these notes form the only kind of money in existence; and that no commercial transactions are made without money passing—neither barter taking place, nor credit being given. Such conditions, no doubt, give a tone of unreality to the discussion, but it is only by completely separating any one cause from all other causes that we can hope to study its particular effects. What, under these supposed conditions, would determine the value of these inconvertible paper notes? The use of such a currency would be to facilitate the exchange of

Under hypothetical conditions, the value of inconvertible notes would vary inversely as their quantity; and prices would vary accordingly.

commodities, and, as these pieces of paper would be practically of no value in themselves, their value as notes would depend entirely on their usefulness for that purpose. There would exist, therefore, in this hypothetical country, a certain definite number of notes in circulation, and this currency would be used as the only and exclusive medium of exchange. A certain number of money transactions would be taking place at one time, and, for each one of these transactions, a certain amount of the note issue would be used; a definite proportion of the whole currency would be utilized in each transaction. If large additions were suddenly made to the currency, some notes might lie idle for a time; but, generally speaking, the owners of the notes would all desire to utilize their possessions; and this they could only do, under the assumed conditions, by discharging their liabilities with them, and by thus passing them into general circulation. Thus the whole of the notes in the country would be in use in facilitating the exchange of commodities in this manner; and it is, therefore, evident, assuming other things to remain the same, that if the total issue of notes is increased, the number of notes utilized in each transaction must increase also. If, for example, the number or money value of the notes in circulation were doubled, other things remaining the same, the number or money value of the notes used in the transaction of each bargain must be doubled also; in other words, prices would be doubled, or the

value of the notes, as measured in commodities, would be halved. Thus, in such a primitive isolated country, it is evident that the value of the notes would vary inversely with the quantity or total money value of the notes in circulation; the greater the quantity, the less would be their value, and the higher would be prices as measured by them. This is known as the "quantitative theory of prices." It is a theory which is now generally held by economists to indicate an important principle, but one which must be accepted with modifications when applied to a metallic currency circulating under modern conditions. No doubt, in the complex condition of existing commercial methods, a great many different circumstances have an influence on prices; but the quantitative theory still remains true in the main; for we shall see no reason to doubt that, under all circumstances, an increase of the currency will tend to raise the general level of prices, though the rise may not be in direct proportion to that increase.

This proposition is known as the "quantitative theory of prices."

The quantitative theory is not strictly applicable to modern conditions;

As an argument to show that the quantitative theory is not applicable to the existing condition of things, it may be said that an increase of currency will in itself produce an increase of business—an increase in the number of commercial transactions—and that the amount of money needed for each transaction will not, therefore, increase in proportion to the increase of notes or coin. This is no doubt true. But an increase in the currency will only cause an increase in business by raising

because, *inter alia*, an increase in the currency does cause an immediate increase of business;

though the ultimate effects may still follow the law.

prices ; and this, therefore, affords no argument for denying that a rise will take place ; it only shows that the rise will not be in proportion to the increment of the currency. Moreover, when discussing the effect of bimetallism on prices, it will be shown that it is highly probable that such means of inflating trade produce no permanent results ; that a rise in prices will give an immediate stimulus to commerce by easing the burden of indebtedness, but that in the long run the quantity of commodities exchanged will be independent of the number, weight, or name of the "counters" used in making that exchange. If we imagine that the owners of all the money in the world woke up one morning to find all their money doubled, and to find that, at the same time, all debts and all prices had been doubled also, then things might go on exactly as before ; and this new commercial equilibrium, with doubled prices, is the state of things which doubling the currency would probably slowly tend to produce. If this be the case, the fact that business increases with an increase of the currency does not prove that the quantitative theory of prices is not accurately true as far as the ultimate effects of changes in the volume of the currency are concerned.

The discussion on credit postponed to Chapter XVI.

The effect of credit on prices is a much more debatable subject, the discussion of which had better be postponed. When this question is approached it will be seen that the immense increase in the use of credit instruments, such as cheques,

etc., does affect the quantitative theory more than any other circumstance; but that there is no reason to doubt the general conclusion that there is an intimate relationship between the volume of the currency and the general level of prices. And this view, as far as inconvertible notes is concerned, is greatly strengthened by historical facts. Whenever the issue of such notes has been largely increased, their value has fallen, and prices, as measured by this currency, have risen; the tremendous depreciation in the value of the French *assignats* in 1794-95, corresponding with each new issue, being the most familiar example of such a change.

In considering the application of the quantitative theory to the case of a metallic currency, it is natural to urge that the value of the sovereign depends on the value of the gold in the sovereign, and not on the number of sovereigns in circulation. At this stage it is merely necessary to remark that the difference between the two views is largely a question of words. For example, when the production of gold is increasing, more metal will flow into the market; and, as with any other commodity, this will tend to lower its value as an article of merchandise. As the value of a sovereign is equal to the value of the gold contained in the coin, it is evident that, in these circumstances, the value of the sovereign will fall also; and that prices as measured by sovereigns will rise. But when the production of gold is increasing, more of that metal will also flow into the gold currencies of the world;

With a metallic currency, prices may be said to depend either on the quantity in circulation or on the value of the metal in the coins.

and, as we have seen, an increase of the currency is, according to the quantitative theory of prices, normally accompanied by a rise in prices. The question of prices with a metallic currency can, in fact, always be studied, as in the above example, either with reference to the value of the metal in the standard coin, or with reference to the number of standard coins in circulation; and it will be found that, by whichever of these two ways we approach the subject, we shall always arrive at the same result.

The
bimetallic
problem
now to be
discussed.

After these preliminary observations on the generally accepted views as to the value of money, it is now possible to pass on to the bimetallic problem. Reverting for a moment to the consideration of an inconvertible note currency, it will be universally admitted that prices will be the same whether the issue consists of a thousand one-pound notes or of a hundred ten-pound notes; prices will, in fact, vary with the total money value of the notes in circulation. It will also be readily admitted that no amount of additional issue of, say, ten-pound notes would alter the relative value of ten-pound and one-pound notes; though it would affect the actual value of both.

If free
coinage
and the
melting
down of
coins were
stopped,
metal coins
would

Passing on to the consideration of a metallic currency, it should first be noted that if restrictions are placed at the mint on the coinage of the metals, then, the value of the coins will not, as a rule, be the same as the value of the metal in them. Thus in India, where the mints are now

closed to the coinage of silver, the rupee is worth more than the silver it contains. If the old laws against the melting down of coins could have been enforced, there is no doubt, if enough coins were issued, that the value of the currency could in like manner have been kept below the value of the metal in it. Thus, if both the melting down or export of coins and the free coinage of bullion were stopped, a monometallic currency would be, in respect to its value, in the same position as a currency of inconvertible notes; decrease or increase the quantity, and we can raise or lower the value of the coins to any extent either above or below their metallic value; that is, above or below the value of the metal in the coin, if sold in the market as an article of merchandise.

If these supposed restrictions on free coinage and melting down of coin were effectively maintained, it is evident that, with a bimetallic currency, the value of the coins would be determined in the same manner as with a monometallic system; the value of the metal itself would have nothing to do with the matter; the value of the whole currency would vary with the total money value of both metals in circulation; notes of a lower denomination being, as it were, printed on silver, and those of a higher denomination being printed on gold, according to some legalized ratio. With inconvertible notes it has been seen that no additional issues of notes of one denomination will alter the relative value of the different notes; and, in the same way, under these

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If free
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conditions, no amount of additional coinage of one metal would alter the relative value of gold and silver coins. If it were enacted that twenty shillings were to be worth a sovereign, the issue of additional shillings would alter the value of both shillings and of sovereigns, but not the relative value of the two; and, under such hypothetical conditions, the bimetallic ratio thus enacted would be maintained with mathematical precision, at all events in all transactions where shillings and sovereigns could be used with equal convenience.

In this discussion it has been assumed that the metals could not be freely taken to the mint. Free coinage is, however, the essence of bimetallism. Let it, therefore, be assumed, as the next step in the argument, that the metals can be freely coined or melted down, but that, in the hypothetical country under consideration, they are not used for any other purpose whatever than for legal tender coinage. Under these conditions it is true that both the relative and the actual quantity of the two metals would depend on the output from the mines; whereas the relative and the actual quantity of inconvertible notes of different denominations, whether printed on paper or on metal, would depend on the caprice of the Government; but the reasons which settle the quantity of notes or coins in circulation cannot affect the laws which determine their value when once they are in circulation. Thus an increase in the coinage of either of the two metals would, without doubt, increase the total money value of the

metals in circulation, and would thus raise prices; but this addition to the currency would not tend to alter the ratio fixed by law between the two kinds of coins. How could it do so? If, for example, an increase in the output of silver from the mines took place, and if, to assume an impossibility, the ratio between gold and uncoined silver changed, so that the value of uncoined silver was less than the value of silver in coins, the owners of uncoined silver would at once have their metal coined; and, when coined, it would immediately acquire for the only use it could be put to under the assumed conditions—that is, as coin for paying debts—its full relative value as compared with gold. On the other hand, we cannot conceive gold rising in value as a metal above its value as a coin; for such a rise in value could only result from a demand for it for some other use; and we have assumed no other use to exist. Thus, on the supposition that the metals are used for no other purpose than for legal tender, it seems that the bimetallic ratio will be maintained with equal certainty whether the right of free coinage exists or not.

It now remains to be seen how the question is affected by the other uses to which the precious metals are put, and this is the real point at issue. The importance of this subject is not fully recognized till it is known that only about half the total stock of gold or silver is used for currency purposes. In the first place it should be noted that, even under the hypothetical conditions just discussed,

But the effect of the other uses of the metals is the real point in dispute.

the ratio between the value of the metals might be so fixed, by bimetallic legislation, that in the case of one or other of them, it would no longer be profitable to work the mines; then that metal would, through wear and tear, gradually disappear from circulation, and monometallism would in the end be established in spite of bimetallic laws. In considering the adoption of a bimetallic system in the future, the actual cessation of the production of either gold or silver is a contingency which need not be considered, because the use of the precious metals in the arts would always create a demand for them, whatever the legal ratio might be. The output of both metals will, of course, continue under all possible currency conditions.

Definition
of "natural
ratio."

In order to understand the effect on prices of the use of the precious metals in the arts, it is best to begin by imagining a condition of affairs when neither silver nor gold is used for currency purposes. It is evident, if this were the case, that the demand for these metals in the arts would establish a fluctuating ratio of value between them, varying with every alteration of their use in the arts, and with every change in their relative output from the mines; and this ratio we may, for want of a better term, call the "natural ratio." If, under such hypothetical conditions, a bimetallic system of currency was introduced, and if the ratio adopted was this "natural" ratio, a proportion of both metals would be withdrawn from the arts in order to be converted into coins, and

If, in a
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this new demand would raise the value of both metals in the market as compared with other commodities; and, *as long as the value of the two metals rose equally*, the natural ratio, which we assume to have been sanctioned by law, would, of course, remain as the ratio between the value or price of the metals as bought or sold in the market. But the question at issue is whether, under these circumstances, the metals would rise equally in value. Let it be imagined that they did not do so; let it be supposed, for example, that after a while the coinage of gold bullion, and the consequent diminution in the amount of that metal available for use in the arts, did raise its value in the market more quickly than the rise in value of silver from similar causes. Under the bimetallic system supposed to be established, the ratio of the weight of a gold dollar—if that were the name of the coin in use—to the weight of a silver dollar would be the bimetallic ratio fixed by law; and as long as the ratio of the value of the metals in the market remained the same as this bimetallic ratio—as long, that is, as the two metals rose equally in value—the amount of commodities which could be obtained in exchange for a gold dollar's weight of gold would be the same as the amount which could be obtained in exchange for a silver dollar's weight of silver. Whilst this condition of things lasted, the owners of gold or of silver bullion, if they had debts to pay, payable in legal tender, could each with equal advantage get their metal coined, and thus obtain the coins with

adopted,
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value, and
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tained;

which to discharge their liabilities. But as soon as gold began to rise in value more quickly than silver, more commodities could be obtained in exchange for the gold dollar's weight of gold than for the silver dollar's weight of silver; and, consequently, the gold dollar's weight of gold could be exchanged directly or indirectly for more silver than that contained in the silver dollar. Under these circumstances, the debtor owning gold would sell or exchange his metal in the market for silver, and thus obtain a greater number of legal tender coins than if he had got his gold coined at the mint; no more gold would, therefore, be coined for the purpose of discharging liabilities; the rise in the value of that metal, due to the decrease of bullion in the market, would cease; and this state of things would continue until the rise in the value of silver, due to the continued demand for that metal for coinage purposes, again established the natural ratio as the ratio between the two in the market. The disturbance in the ratio could thus only be of a temporary character; and, generally speaking, both metals would rise equally in value, and the ratio in the market would continue to be the same as the ratio established by law.

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under like
conditions,
an extreme
ratio were
adopted,
only one
metal
would be

Continuing the consideration of the introduction of bimetallism into a country where the precious metals had not previously been used for coinage purposes, it can be seen, by reasoning similar to that used in the last paragraph, that if the legalized ratio differed somewhat from the natural ratio, or

that originally ruling the market, then there would be an obvious tendency at first to take one metal rather than the other to the mint; to take what may be called the cheaper metal, or the metal for a given value of which the greatest number or money value of coins could be obtained. The value in the market of only one of the two metals would thus at first be raised, and in this manner the ratio in the market would be altered until it became the same as the ratio fixed by law. When this equality was established, both metals would be taken to the mint indifferently. It is, of course, obvious that the more the legalized ratio differed from the natural ratio, the longer would last this process of adjustment; and, if the two ratios differed sufficiently, the demand for coins would be satisfied by the coinage of one of the metals only before any of the other was attracted to the mint. When, with such an extreme ratio, the normal condition of things was reached, and the mints ceased to increase the currency, then no further alteration in the ratio in the market would take place; the ratio in the market would never become the same as the ratio enacted by law; and the currency would continue to consist wholly of one metal. Bimetallic laws would have been passed, but a monometallic system would have been established.

This discussion of the result of planting a bimetallic system on new soil makes it clear that, when we find a bimetallic system being successfully maintained, we cannot assume that the ratio

coined,
and the
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would be
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metallic.

The ratio
in the
market is
the best
but an
unreliable

guide as to
what may
be the
natural
ratio.

in the market or the legalized ratio—they will be identical—is the same as the natural ratio, or the ratio which would have existed if the metals had not been in demand for currency purposes. If, on the other hand, the systems in existence are monometallic, and especially if they create a greater demand for one metal than for the other, the ratio in the market will also, in this case, differ more or less considerably from the natural ratio. Under all circumstances, the ratio in the market and the natural ratio may differ widely, one from the other, but unfortunately the ratio in the market is almost our only guide as to what the natural ratio may be.

The
conclusion
arrived at
is that
the parity
will be
maintained
if the ratio
is properly
selected.

Putting aside, at last, all hypothesis as to existing monetary conditions, if a bimetallic system were now established legalizing the natural ratio, as long as that natural ratio remained unaltered—as long, that is, as the conditions of supply and of demand for the metals for use in the arts remained the same—we can see, by reasoning analogous to that just given, that this legalized ratio would be maintained as the ratio in the market, and that both metals would continue to circulate freely in the currency. Similarly, if the legalized ratio differed sufficiently from the natural ratio, either in the first instance or eventually, it can be seen that the whole of one of the two metals would be driven out of circulation, and a monometallic system would in reality be established; but that the more nearly the two ratios coincided in the first instance, the less likely would such a result be to occur. When it is

remembered that the gold coinage of the world (including reserves) is over £800,000,000 in money value, it would appear to be out of the question, if the ratio adopted approximated to the natural ratio, that all this metal should be driven out of the currency and used up in the arts. Some gold would remain in circulation as legal tender, and that gold, for the ordinary purposes of paying debts, could only be used at the ratio fixed by law.

It has been asserted that the relative cost of the production of the two metals is bound ultimately to regulate their relative value, and that, as the cost of production will not be affected by any bimetallic legislation, and as that cost is certain to vary from time to time, it follows that corresponding changes in the ratio of the value of the two metals must inevitably take place in spite of bimetallic laws. No doubt if two mines were situated near together, one producing nothing but gold and the other nothing but silver, and if both were only just paying their working expenses, then the ratio of the prime cost of production of an equal weight of metal in the two cases would closely coincide with the legal bimetallic ratio as long as that ratio was maintained in the market; for if a pound of silver only produced just enough silver coins to pay for the cost of producing that pound of silver, and if a pound of gold only produced just enough gold coins to pay for the cost of producing that pound of gold, then the ratio of the cost of production would be the ratio of the value of a pound weight of silver

As an argument to the contrary, it is said that the relative cost of production regulates the ratio of value. This is only true in a limited sense.

coins to a pound weight of gold coins—that is, the bimetallic ratio. If it could be assumed that the number of mines could be indefinitely multiplied, then it would be true that their number would increase until the rate of profit in the least profitable mines would be reduced to the minimum required to attract capital to the industry; and this rate of profit would be the same for silver and for gold mines. If it could also be assumed that all mines were worked under similar conditions, then it would also be true that capital would flow into the mining industry until the mines were all only just paying their working expenses and making this minimum profit. If these assumptions were true, then the foregoing arguments prove that the ratio of the values of the two metals would always be tending to coincide closely with the ratio of the cost of production. But neither of them is true. The mine fields are not of unlimited extent. And, what is more important, there are great variations in the cost of production in different localities, and in different mines in the same locality. Putting aside recent ventures, worked as a speculation, it may however be said, with some approach to truth, that in the least profitable mines regularly worked (where no valuable by-products are produced to help to maintain the profits) the ratio of the cost of production would be the same as the legal ratio. If some process were discovered, after the adoption of bimetallism, which considerably cheapened the cost of production of one only of the metals, the result

would be that some new mines of that metal would be opened, and that some of the least profitable mines of the other metal would be closed; and that this process would go on until, in time, the prime cost of production in the least profitable similarly situated mines would again roughly approximate to the bimetallic ratio.

There are some authorities, no doubt, who think that the output of silver will increase with great rapidity, even under existing conditions, and that the increase will be still more marked if the value of silver is maintained or increased by means of bimetallic legislation. Of course, if the output of silver did increase beyond a certain point, all gold coinage would be driven out of circulation in bimetallic countries. Such an excessive production would be due either to the opening of new silver fields, or to a further diminution in the cost of production, or to both causes. As to the possible influence of the development of new silver fields, it is no doubt true that great variations in production have resulted in past times from this cause; for the best available records indicate that during the last four centuries the weight of silver annually produced has been sometimes over fifty, and sometimes under five times the weight of the output of gold.¹ What has happened in the past will probably happen again in the future; but in the past the excessive relative output of the one metal has always gradually subsided, together with the

The predictions as to a flood of silver, even at the present price, are not justified by facts;

¹ See tables in Appendix.

apprehensions which it caused. According to what appears to have been the opinion of the majority of American experts, there were in 1887 "certainly no threatenings of a sudden or serious increase in the annual production of either" metal, and, although the events of the last few years were not then foreseen, the broad facts on which their conclusions were based may still justify their statements as far as the more distant future is concerned.¹ Comparing the production in the year 1895 with that in any year since 1885, it appears that the output of gold has increased somewhat more rapidly than that of silver. In these circumstances there are no sufficient grounds for confidently asserting which metal will increase in value, relatively to the other, during the next few years, granted the continuance of existing monetary arrangements.

Turning to the other possible cause of a great increase in output, it is almost impossible to predict the effect of any future diminution in the cost of production. Of course, if any new method was discovered which was only applicable to one of the precious metals, it would affect the ratio of production; but as regards all the expenses connected with winning the ore or rock—a considerable fraction of the prime cost—any new mechanical improvements will affect the cost of production of both metals, and will not, in all

¹ See Report by Mr. Newberry (whose words are quoted) and by other experts, at pp. 414-433, Reports from the Consuls of the U. S., vol. 24, 1887.

probability, seriously alter the ratio of output. As to the immediate future, it may, perhaps, be said that there is no reason to anticipate any great variation in the relative value from this cause.

Thus far, the ratio of production has been discussed on the assumption that no great alteration in the demand for the metals for coinage purposes will take place. If the value of silver were raised by bimetallic legislation, this would be a circumstance tending to increase the production of that metal more or less considerably; for there are said to be "large quantities of low-grade silver ore which are constantly seeking a sale at the smelting works, but in vain, because the price of silver now leaves no margin to the owner of the ore after smelting charges have been deducted."¹ But it is extremely difficult to foretell to what extent the silver industry would be stimulated by any proposed legislation; paying mines are now, in most cases, being worked to their utmost, and we do not know what percentage of all the mines now in work produce these low-grade ores, or what new mines are likely to be opened under such circumstances. My own impression is that some of the bimetallic proposals now before the public would lead to a

but it is difficult to foretell what would be the effect on production of raising the value of silver by bimetallic legislation.

¹ Reports from the Consuls of the U. S., vol. 24, 1887, p. 420. It should be noted that the ratio may also change through the lowering of the value of gold; and that that would not tend to increase the output of silver. This is important, if, as I believe, the value of gold would fall more than the value of silver would rise in consequence of any bimetallic legislation.

great outburst of silver production, which would gradually subside, at all events if the production is measured by its ratio to the production of gold. When discussing the choice of the bimetallic ratio it will, however, be seen that the probability of gold being driven out of circulation by this "avalanche" of silver depends on the ratio adopted, and this point may, therefore, be dismissed for the present.

Thus it may be concluded that the bimetallic ratio will govern the bullion market until one metal is driven out of circulation ;

Thus it appears, if these conclusions are correct, that the value of the precious metals is influenced by their use in the arts, by their use as money, and by the cost of their production ; but that the legal ratio between the two will nevertheless be maintained as the ratio in the market as long as both continue to circulate as legal tender—as long as neither metal is driven out of circulation. If this is not clear already, let it be supposed, for the purposes of argument, that one of the metals, say, silver, continues to depreciate as compared with gold in spite of the passing of bimetallic legislation, and that gold goes to a premium. Why, under these circumstances, should any one use gold for the payment of debts, or for making purchases, when he could obtain more value for his metal by selling it in the open market? Gold coins would be melted down and sold, and this process would reduce the price of gold bullion by throwing more of that metal on the market ; this cheapening process would be so rapid that an equilibrium would immediately be re-established ; the two metals would

and mono-metallists should indicate

continue to circulate in the currency at the legal ratio, and this legal ratio would again govern the bullion market. In fact, in the opinion of bimetallists, this process, or something equivalent to it, would take place so quickly that no depreciation of either metal could in reality be observable in the market. If silver continued to be produced in increasingly large quantities, the expulsion of gold from the currency would no doubt go on until the whole of that metal was driven out of circulation, and until silver was exclusively used for monetary purposes; then the process by which the ratio in the market had previously been adjusted so as to make it coincide with the ratio fixed by law would cease to operate; then, and not till then, the ratio in the market would differ from the legal ratio, and the currency would cease to be bimetallic. One or other of the metals must be entirely or almost entirely driven out of circulation before the bimetallic system can fail, and monometallists ought, if they still predict the continued depreciation of silver under bimetallism, to tell us what is going to happen to the £800,000,000 of gold coins now in existence. Until they do so, they have not made out their case against the practicability of bimetallism.

To account for the disappearance of one of the metals from the currency, monometallists have argued that gold will flow in sufficient quantities to drain the bimetallic countries of their gold currency into those countries which do not join the Bimetallic

what they believe would happen to all the gold coinage when it disappears from the currency.

The Bimetallic Union, it is true, must include a wide area

to be
effective.

Union, and thus to force that metal to a premium. Silver-using countries would, in this respect, be a greater source of danger than gold-using countries; because, by partially substituting gold for silver in their coinage, they could absorb vast quantities of gold. This might also be, in my opinion, a real danger to bimetallism, and in order to guard against it, it is most desirable that the Bimetallic Union should comprise India and Japan as well as the other countries previously mentioned. China would, in those circumstances, remain as the solitary great silver-using commercial nation, to which gold might be attracted; but as China is conservative and barbaric, and as she has no gold currency at present, this is but a remote contingency, which the influence of Japan might overcome if it ever occurred.

It is
suggested
that gold
may be
hoarded;

Monometallists have also asserted that gold would be withdrawn from circulation on the establishment of bimetallism, and that it would be hoarded in the expectation of its going to a premium at the breakdown of the system. We shall have to return to this point later on, when it will be seen that this is a true source of danger to the maintenance of a bimetallic system, if the ratio adopted differs widely from the ratio now governing the market.¹

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gold may
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to a pre-
mium by
being used
as currency

As another reason for anticipating the failure of any bimetallic system, it is suggested by monometallists that gold might be used as a kind of separate currency, independent of the laws of legal

¹ See p. 101.

tender, independent of the silver currency, and at a premium compared with it. The fear of payments being made in silver would often, it is said, make financiers negotiate loans in gold by weight, and not in currency; contracts would be made in the same way; and the use of gold in such bargains would be sufficient to maintain that metal at a premium compared with silver. It will be shown in a subsequent discussion that, if a suitable ratio is selected, no rational reason can be given for avoiding the use of the ordinary legal tender, and that this danger may then be neglected. This, however, is a point to which bimetallists have not devoted sufficient attention, for either the objection is groundless, under all circumstances, or legislation prohibiting "contracting-out" of the usual currency arrangements would appear to be a necessary part of the proposed international agreements, at all events in the case of the adoption of an unsuitable ratio. In order to prohibit such contracting out, it would be necessary to enact as to future contracts (except such as deal with metal used for non-monetary purposes), that where the word "gold" occurs, the word "silver" may be read in its place, with an appropriate alteration in the weights specified. An interference with the freedom of contract is no doubt an objectionable feature in any scheme, to be avoided if possible; but the difficulty of drafting clear and suitable legislation which would be acceptable as part of the international agreements, forms, in my opinion, a far stronger objection to such a proposal.

independently of the laws of legal tender; but the probability of these dangers to bimetalism depends on the ratio adopted.

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When, if ever, bimetallism comes within the region of practical politics, it would be advisable to consider if some such legislation of a temporary nature could be adopted; for the tendency to contract unreasonably out of any new arrangements is always felt most strongly at first. If, however, after a few years, bimetallism proved to be so distasteful to the commercial community that it could not stand without the aid of permanent legislation of this character, then perhaps the sooner it fell the better.

The verdict is on the whole favourable to bimetal-
lists as regards the main-
tenance of the ratio.

If none of these methods of escape for gold are sufficiently serious to be a source of real danger, then it is difficult to see how bimetallism can break down as long as the international agreements are maintained; for as long as gold remains in circulation as legal tender, it can only be used at the ratio fixed by law.

Thus, whether the appeal is made to the best available authorities, or to historic facts, or to theoretical arguments, the verdict as to the maintenance of *properly selected* legal ratio is, I think, on the whole, favourable to the bimetallists.

CHAPTER III.

AIMS AND OBJECTS OF BIMETALLISTS.

IF it is agreed that a suitable ratio of value between the metals can be maintained with sufficient accuracy for practical purposes, it is next necessary to consider what are the objects which bimetallists hope to obtain by their proposed reforms. Here we meet with our first difficulty, for on this point there is far too much ambiguity in bimetallic literature. It may, however, be broadly stated that bimetallists desire one or both of the following objects:—

(1) To make prices more steady by lessening the fluctuations in the value of money, and to minimize the troubles due to the fluctuations in foreign exchanges.

(2) To raise the price of commodities generally, including the price of silver.

Bimetallists claim that, by creating a feeling of confidence as to the future, their monetary system would stimulate commerce—an object desired by all—and that it would thus raise prices. Putting aside, for the present, such indirect results, and

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demanded.

considering only the direct and immediate rise in prices which, it is generally anticipated, would result from the introduction of a bimetallic system whether the volume of trade were increased or not, it will no doubt be urged by some currency reformers that they do not demand this reform with the definite object of producing any such effect. It would be, they will say, merely a result, probably a beneficial result, which would necessarily accompany bimetalism; an inevitable by-product, as it were, for which they are not responsible. This is, I believe, a common and a serious error, which has arisen from not clearly distinguishing between the different objects aimed at by bimetalists, and from not discussing them separately.

This is inaccurate. The effect of bimetalism at a ratio of $15\frac{1}{2}$ to 1 would be to increase the currency in gold-using countries, and thus to raise prices therein;

To point out the nature of the error of those who argue in this manner, it is first of all necessary to show that bimetalism, even if successfully adopted, need not be accompanied by any direct and immediate rise in general prices. The discussion of this subject will be greatly facilitated by taking actual figures for consideration, both as to the proposed legal ratio, and as to an assumed ratio in the market at the time the system is being introduced. As to the proposed legal ratio, the one most frequently mentioned is $15\frac{1}{2}$ to 1; that is to say, if that ratio were adopted, $15\frac{1}{2}$ ozs. of silver coins would have the same money value as one ounce of gold coins.¹ What would have been the effect

¹ This is not strictly accurate, because the coins are not made of pure gold and silver.

of enacting this ratio in 1893, for example, when $24\frac{1}{2}$ ozs. of silver could have been exchanged for one ounce of gold in the open market? At that time, with the ratio in the market at $24\frac{1}{2}$ to 1, one ounce of pure silver could have been sold for about 3s. 6d. But if a change in the law had been made which permitted the owner of the ounce of silver to have had it coined at a legal ratio of $15\frac{1}{2}$ to 1, it is evident that it could then have been converted into more currency than that for which it could previously have been sold in the market; in fact, taking the proportion of $15\frac{1}{2}$ to $24\frac{1}{2}$, it will readily be seen that, instead of the 3s. 6d., he would receive from the mint the sum of about 5s. 6d. for every ounce of silver he took there. It is, therefore, perfectly clear that this change in the law would increase the value of silver for coinage purposes, and that the owners of that metal, instead of selling it in the market, would take it to the mint. The amount of silver for sale in the market would be reduced, and its price and value would, therefore, rise. But the silver thus taken from the arts, etc., would be added to the coinage, and thus the total currency in circulation would be increased; and, according to the quantitative theory of prices, an increased currency is normally accompanied by a rise in prices. A rise in prices is, of course, equivalent to a fall in the value of the thing by means of which the price is estimated; a rise in prices in gold-using countries means, therefore, that the value of the gold currency is

lowered. But the increase of silver coins would be no reason why gold, as an article of merchandise, should fall in value; and there would at first, therefore, be a tendency for gold in the currency to fall in value as compared with gold in bullion. This difference in value would, however, be rapidly corrected both because gold from the mines would be taken to the best market—the bullion market—instead of being taken to the mint, and because gold coins would be melted down as long as gold was more valuable in the form of bullion; and these additional supplies thrown on the market, would lower the value of gold bullion *pari passu* with the fall in the value of the gold currency. In short, more silver would be coined, and the metal thus used would diminish the supply in the market, thus raising its value; and gold would be taken from the mines and from the currency, and thrown on the market, thus reducing its value as bullion. These two processes would go on till the ratio between the value of gold and silver in the market coincided with the ratio established by law; and the fall in the value of gold would indicate the rise in prices in gold-using countries.

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Thus far, we have been considering the effect of the adoption of bimetallism at a ratio of $15\frac{1}{2}$ to 1 in gold-using countries like England; but in the case of silver-using countries, the results would be very different. Silver, we have seen, would tend to rise in value; and therefore it is evident, considering the value of the metal in the coinage, that

prices measured in silver coins—silver prices—would fall. This result can also be arrived at in a more elaborate way by looking at the question from the point of view of the quantitative theory of prices. In India, for example, every one had the right in 1893¹ to take silver to the mint, and to have it coined into rupees; the introduction of a bimetallic system would have created no additional inducement to coin that metal, for a given weight of silver would produce the same number of rupees before and after the change; no more silver would, therefore, have been coined in consequence of bimetallic laws. And as to gold, which was a mere article of merchandise in the East, the owner of an ounce of that metal could have sold it in the market at that time, when the ratio in the market was $24\frac{1}{2}$ to 1, for about 70 rupees; but if he had taken it to the mint, after the establishment of bimetallism at $15\frac{1}{2}$ to 1, he could only have had it converted into coins of the money value of 45 rupees. Thus no gold would be taken to the mint, and the currency would not be increased by the exceptional coinage of either metal; in fact, the introduction of bimetallism at that ratio, would have produced no direct effect whatever in India. There are, however, important indirect influences to be considered. As far as has thus been seen, the establishment of the legal ratio would have had no influence on the price of gold in India, and it would, therefore, have remained at its old ratio,

¹ This is true only of the early part of the year.

compared with silver—at a ratio of 1 to $24\frac{1}{2}$. But on the supposition that the bimetallic system had been successfully established, it has been seen that the value of silver would have risen in gold-using countries until the legal ratio of $15\frac{1}{2}$ to 1 was established in that market. When this had taken place, it would have been a profitable business to have melted down Indian silver currency; to have taken the metal to England to be coined; and, in exchange, to have brought back to the East the melted-down English gold coins, in order to satisfy the demand for that metal; and this influx of gold into India would have lowered its value there. This exchange of coin would be a profitable business, and it would go on until the ratio became the same in the two countries; until, in fact, the legalized ratio of $15\frac{1}{2}$ to 1 had been established in the Eastern market also. Now, if gold coins were taken from England, and if they were replaced, as in this instance, by the same nominal value of silver coins, the total money value of the coinage in England would remain unaltered by the exchange, and no direct effect would be produced on English prices. But in India the gold brought into the country would be absorbed into the arts until the ratio was adjusted; nothing would have been added to the currency, and silver—the melted down rupees—would have been subtracted from it; the volume of currency in circulation would, therefore, be lessened; and prices would have a tendency to fall.¹

¹ This tendency of silver to flow out of the Indian currency

Thus far the result of this discussion has been to indicate the probability that the introduction of the $15\frac{1}{2}$ to 1 ratio, at a period when the ratio in the market was $24\frac{1}{2}$ to 1, would have raised prices in gold-using countries, and would have lowered them in silver-using countries. But the effect of the adoption of other ratios must be considered. To have introduced a bimetallic system at a ratio of 40 to 1, would have involved just about the same departure from the then existing condition of things as that just contemplated;¹ it would, no doubt, have been a change in the opposite direction, but a change quite as conceivable for the purposes of discussion.

If, on this new supposition—the adoption of a 40 to 1 ratio, when the ratio in the market was $24\frac{1}{2}$ to 1—we retrace the arguments just given in support of the view that bimetallism will raise prices in England, and lower them in silver-using countries, we shall find that every one of them is reversed. For example, the owner of one ounce of gold should not be forgotten by those bimetallists who are so keenly advocating the opening of the Indian mints. No doubt the opening of the mints would help to raise the value of silver until the value of the silver in the monopoly rupee was equal to the value of the monopoly rupee itself; but directly silver rose above that point, the opening of the mints would give no further assistance towards the establishment of the legal ratio, for then the tendency would be for silver to flow out of the Indian currency. An undertaking not to open the mint to gold, except at the adopted bimetallic ratio, would be a far more important concession to the demands of bimetallists.

But if a higher ratio than that ruling the market were adopted, prices would be lowered in gold-using countries and raised in silver-using countries.

¹ 1 to $15\frac{1}{2}$: 1 to $24\frac{1}{2}$:: 1 to $24\frac{1}{2}$: 1 to 39.

gold could have sold it in India in 1893 for about 70 rupees; but had bimetallism at a 40 to 1 ratio been then in force, he would have been able to have taken it to the mint, and to have had it coined into coins of the value of about 115 rupees; his gold under this bimetallic system would have become far more valuable for coinage purposes. Gold would, therefore, have been taken from the arts and from hoards to the mints in the East; the currency would have increased there, and, other conditions remaining the same, prices would have risen. In gold-using countries, on the other hand, there would have been no reason why, in consequence of this reform, more silver bullion should have been converted into coins; and similar reasons to those above given would indicate the probability that gold would leave gold-using countries, thus diminishing the currency, and lowering prices.

Thus bi-
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Thus, it is possible to introduce either a system of bimetallism which will make prices fall, or one which will make them rise; and those who desire that prices should rise in gold-using countries must advocate, not only bimetallism in general, but a special form of it—a bimetallism, namely, in which the ratio is $15\frac{1}{2}$ to 1, or, at all events, a ratio nearer that ratio than the ratio now ruling the market. No one would have been likely to advocate bimetallism at a ratio of 40 to 1 at a time when the ratio in the market was only $24\frac{1}{2}$ to 1. Extreme suppositions are, however, often useful in discussions, and in this instance they make it clear that there

must be some ratio which would not tend to have any such immediate influences on prices as those above described, either in one direction or the other. What that ratio would be for various reasons we cannot accurately foretell; but, if we adopt the ratio in the market for the time being as the bi-metallic ratio, it would seem probable, as far as these considerations are concerned, that the volume of the currency would be little affected by the change, and that the introduction of bimetallism would cause but little rise or fall in general prices.

Some of the above arguments may be objected to by monometallists; for, it is true, they are too brief to present the whole case, and also that some assumptions have undoubtedly been made in favour of the views of bimetallists. But, for the moment, all that it is necessary to prove is that those bi-metallicists who advocate bimetallism at the ratio of $15\frac{1}{2}$ to 1, on the ground that it can and will raise prices in gold-using countries, cannot deny that it would be equally possible to depress prices by selecting a ratio suitable for that purpose. Bimetallicism and the immediate raising of prices have, therefore, no necessary connection one with the other.

Thus the question of the ratio had better be settled before discussing the relative merits of monometallism and bimetallicism.

Thus we have two distinct questions to consider—

(1) Would the introduction of bimetallicism be a beneficial currency reform?

(2) If it is to be introduced, ought we to adopt such a ratio as would tend to raise prices?

The above is, no doubt, the natural order in which

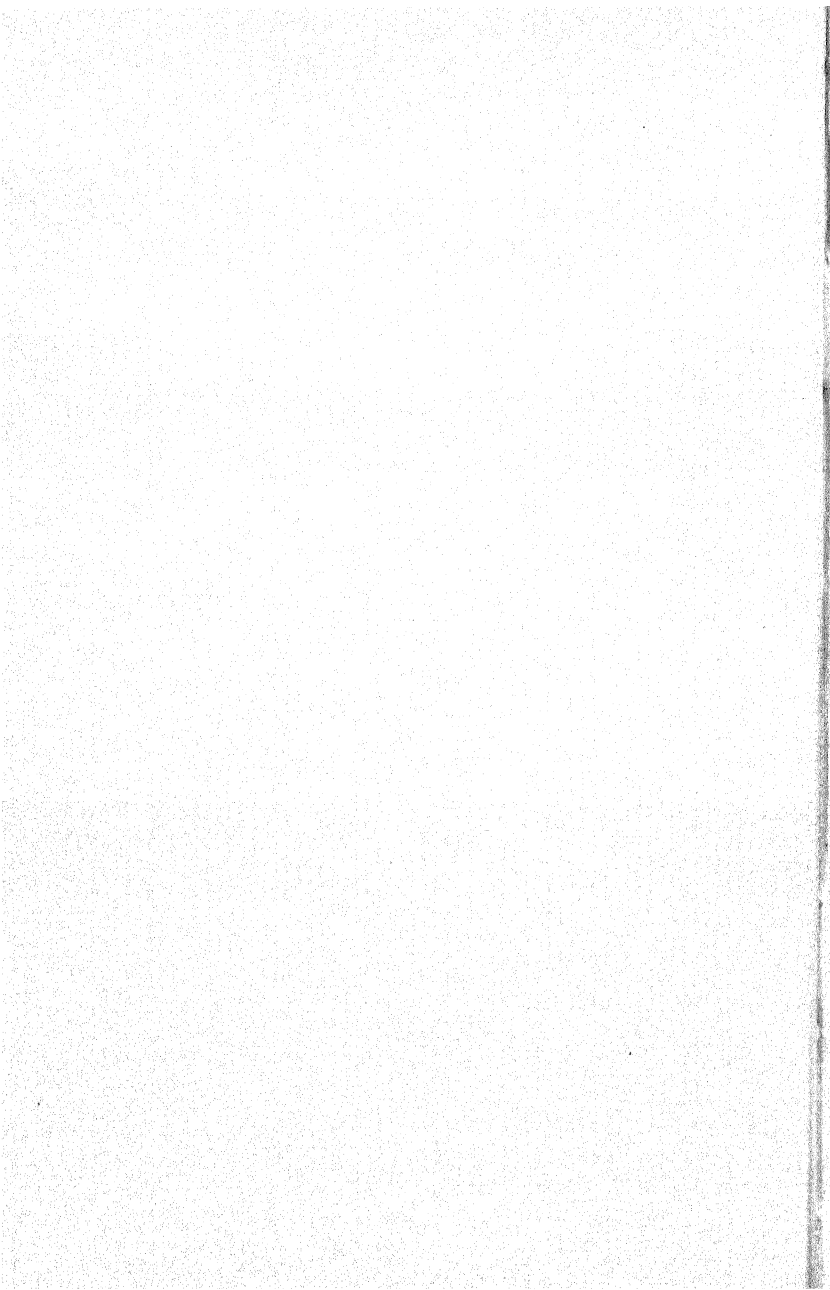
these questions occur to the inquirer; but sound conclusions may perhaps be more easily reached if we attack the problem another way, and ask ourselves in the first instance—

(1) Assuming that bimetallism is preferable to monometallism, can we lay down any principles with regard to the ratio?

(2) And, secondly, which would be best, the existing monometallic monetary systems, or an international bimetallic system with a ratio selected in accordance with the principles laid down in the answer to the first question?

The reason why this is a better method of approaching the subject is that many of the arguments brought forward for or against bimetallism only apply in reality to one form of the system. In considering any reform, it is clearly necessary to decide as to what are the objects we hope to attain before settling how we shall endeavour to attain them; the choice of the ratio will, however, depend in great measure on whether it is or is not desirable to raise prices by means of currency reforms; and the proposed division of the subject will, in effect, be nearly equivalent to the discussion of the second object, the raising of prices, before the discussion of the first, the steadying of prices. After concluding this first inquiry as to the ratio, those who accept my conclusions will be able to dismiss altogether many of the ordinary arguments, when, in the second inquiry, the broad question of adoption or rejection of the bimetallic system is being considered.

THE CHOICE OF A RATIO.



CHAPTER IV.

THE CHOICE OF A RATIO.

THE first question, therefore, to be discussed is the ratio, and here practically the choice lies between the extremes of $15\frac{1}{2}$ to 1—a ratio which existed for many years in France—on the one hand, and, on the other hand, a ratio closely approximating to the ratio governing the market at the time of the introduction of the system. It may here be noted with regard to the latter form of bimetallism, that it would, no doubt, be necessary to take into consideration any speculative operations tending to alter the relative value of the precious metals with a view to the coming change, and to see that the selection of the ratio was not influenced by any such proceedings.

At the present time the ratio in the market is somewhere about 35 to 1, and this ratio would be popularly described as being “higher” than the old Latin Union ratio of $15\frac{1}{2}$ to 1. The term “low ratio” will, therefore, be used to denote the ratio of $15\frac{1}{2}$ to 1, or some close approximation to that ratio; whilst “market-ratio” bimetallism will signify the system if the ratio adopted is the

The choice lies between the market ratio and the ratio of $15\frac{1}{2}$ to 1 as extremes.

Definition of “high,” “low,” and “market” ratio.

same as, or nearly the same as the ratio in the market at the time of the introduction of the reform. The phrase "low ratio" is selected for want of a better, for it is attended with some inconveniences. If the idea attached to it is carried out, we must say that the ratio has been "rising" since 1873, though the change which has taken place is usually associated with the idea of a fall in the price of silver. It is, however, equally true that the price of gold, as measured in silver or in rupees, has been rising, and when a low ratio is mentioned, the idea of a low value or silver price of gold should be brought to our minds. The expression "market ratio" may perhaps give the idea that the legal ratio is to be a shifting one, varying with every subsequent variation of the ratio in the market. This, however, is not intended to be the case. The legal ratio would be fixed once for all, and, if the system were a success, there would be no further variation in the ratio in the market. Market-ratio bimetallism would, in fact, be intended to stereotype the ratio which ruled the market at the time of its introduction.

The relative merits of low-ratio and market-ratio bimetallism now to be considered.

These, then, are the two extreme ratios which must be discussed. Of course, some ratio between the two might be adopted as a compromise, but, by considering the extremes, we shall best be able to judge of the tenacity with which we should adhere to any conclusions arrived at. What then are the relative advantages, disadvantages, and risks of these two forms of bimetallism? It may be best

to begin by discussing the arguments to which least weight should be attached.

A low ratio, as compared with a higher ratio, has been advocated on the ground of convenience, and it is true that the sovereign in silver would weigh twice as much, if the ratio adopted were 31 to 1, as it would if it were only $15\frac{1}{2}$ to 1. But it must be remembered, as already pointed out, that under the low-ratio system the value of the sovereign would fall; that the sovereign would purchase less; and that the money value of the money which we should have to carry about in gold-using countries for the general purposes of life would be greater than at present, or than under the market-ratio system. The greater convenience of low-ratio bi-metallism is, therefore, partly fictitious, though the argument is true in a great degree. It is, moreover, to be observed that the annoyance due to the increased weight of silver coins under a market-ratio system might be mitigated by a more extensive use of paper currency; and that it is doubtful if there would be any necessity for increasing the weight of the coins *in circulation*, for they might well remain mere tokens as at present; whilst the full weight silver reserves might lie in the banks till wanted for the purposes of international trade. But in discussing the question of convenience another very important point must be considered. A decrease in the value of gold, and an increase in the value of silver due to a low-ratio system, are certain, as already pointed out, to be followed by an increase of the silver

The greater weight of silver coins is an objection to the market ratio as compared with the low ratio;

but the use of notes and token coins would mitigate this inconvenience;

and the
market
ratio would
keep more
gold in
circulation.

currency, and a diminished supply of gold coins. Now, as this diminution in the gold coinage would be attended with more or less inconvenience in countries where gold is habitually used as currency, it would seem on the whole, as far as convenience is concerned, that the balance of argument is, if anything, against the low-ratio system, if we look at the question from an English point of view. If the market ratio were adopted, there is little reason to suppose that any material alteration in the proportion of the metals used in coinage would occur on the introduction of bimetallism.

If, under
a market-
ratio
system,
France had
to recoin
her silver,
it would
decrease
greatly in
money
value;

The controversy about the weight of silver coins is, however, likely to be much less severe than that concerning their present money value. France, to take the case of one of the nations most affected, has a large amount of silver five-franc pieces in reserve and in circulation, which have now a money value of about £84,000,000—that is, taking twenty-five francs as being equivalent to a sovereign.¹ But silver has fallen greatly in value since the silver in twenty-five francs was equal in value to the gold in a sovereign—that is, since the ratio of $15\frac{1}{2}$ to 1 ruled the market; and these five-franc pieces do not therefore now contain silver of the above value. If the silver coinage of France were melted down in order to be recoinéd under a market-ratio bimetallic system—let us say at a ratio of 35 to 1, which is

¹ "Colloquy on Currency," p. 33. In addition to this, there are silver coins of lower denominations, coined at a somewhat different ratio.

not very far from the existing ratio—the metal obtained from these pieces would, therefore, only produce coins to the value of about £37,000,000.

Thus the coinage of France, for the purposes of internal trade, would be reduced in money value by £47,000,000; and it is generally said that France would, under the assumed circumstances, lose that sum by the proposed currency reform.

But this is a very unfair way of stating the case, for, in a sense, France would lose nothing by the establishment of market-ratio bimetallism. For the purposes of external trade, her silver coinage is now worth less than half its money value, because it

but she would not be impoverished relatively to other nations;

can only be exported as metal; after the establishment of market-ratio bimetallism, it would also be exported at its metallic value, and that metallic value would not be altered by the adoption of such a system. Thus France, in comparison with other nations, would be relatively neither richer nor poorer in consequence of the change. It is said, however, that she would be put to a considerable expense, if a market-ratio system were adopted, on account of the necessity of increasing the weight of her silver coinage, so as to make its metallic value the same as its money value. But this expenditure would not be necessary if it were found to be possible, after the establishment of bimetallism, to maintain the existing silver coinage at its present money value. If notes of convenient money value were given by the State in exchange for bullion, and if this bullion were kept in the banks

and such recoinage would probably be unnecessary.

as a deposit against these notes, then the State might, as at present, reserve to itself the monopoly of coining the current silver pieces, and might retain the whole of the existing silver coinage in circulation at its present token value. The risk of false coinage is often urged as an objection to such a proposal; but that risk exists at present, and it would not be increased by any such reform. If, however, any inconvenience or difficulty were experienced in retaining the existing token coinage in circulation or reserve, it cannot be denied that the cost of the recoinage might be greatly lessened by not recoinage the whole of it at its full metallic value—by, in fact, retaining some token coinage in circulation. Moreover, if there is any objection to the present system, and if France had to incur some expenditure on recoinage, then she would at all events obtain the advantage of removing these defects attaching to her present monetary condition. In short, if market-ratio bimetallism were adopted, France would not be impoverished relatively to other nations, and she might, at the worst, find herself under the necessity of incurring a more or less considerable expenditure on recoinage, with the compensating advantage that her currency would be placed on a sounder footing than at present.

Market-ratio bimetallism would only ensure France

If, as some believe, the tide will soon turn, and silver will rise in value as compared with gold, it is evident that the metallic value of silver currency will, by a natural process, rise slowly

towards its money value. If it be granted that market-ratio bimetallism is some day to be adopted, it is evident that France, on the above assumption, would prefer the change to come later rather than sooner; for the lower the ratio at the time of the adoption of such a system of bimetallism, the less would be the diminution in money value of such silver as had to be recoined; the more nearly would the ratio at which it would be recoined approach to the old ratio of $15\frac{1}{2}$ to 1. But, on the other hand, if silver is going to continue to fall in gold price, the currency of France will become more and more overvalued, and in time serious difficulties would probably arise from this cause. Thus, market-ratio bimetallism, whilst it would prevent France from speculating for a rise in silver, would insure her against the inconvenience of a further fall; it is, therefore, difficult to prove that it would do her any harm as regards the value of her silver coinage.

Thus far, we have been considering the effect of the introduction of market-ratio bimetallism into France. But if a low-ratio system were adopted, the case would be very different. The result of such a reform would be to link the two metals together, and to pull up the value of silver by pulling down the value of gold. France would have the silver in her currency brought up to its money value at the expense of the gold stocks of the world.¹ As

¹ It is, however, very questionable whether the French, as a nation, would gain by low-ratio bimetallism to the extent here

against
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silver;

but a low-
ratio system
would be
a direct
benefit to
France.

France possesses a greater proportion of silver than England, she would gain in comparison with England. If we, in England, desired to bring up the metal in our token coinage to its money value, no one would argue for a moment that we should adopt bimetallism for that sole purpose. If this were the only question at issue, we should certainly prefer to pay, out of the general taxation of the country, for the additional silver necessary to increase the weight of our coinage. Why, then, should we be asked to make a pecuniary sacrifice to enable France to bring about a currency reform in a manner we ourselves should not adopt? It can, at the best, only be urged that the appreciation of silver*token coins in all countries where they are current, and the consequent immunity from the risks of false coinage, would be one of the beneficial by-products of low-ratio bimetallism; which is but a feeble reason in favour of England adopting that system.

indicated. The amount to which her silver currency is over valued—the £47,000,000—may be looked upon as a Government credit issue. This credit would be extinguished by the introduction of this type of bimetallism. The result would be, I think, that prices would tend to fall in France relatively to other countries. This inequality would be rectified by the precious metals flowing into France, thus displacing other imports. Thus France would suffer by exporting goods for which she would get no goods in return, which were available for distribution—a clear loss to France, and a clear gain to the other nations concerned in the traffic. This is the way France, and the United States also, would, I believe, in large measure pay for having their silver coinage brought up to its full metallic value.

France may, however, simply state that she declines to agree to market-ratio bimetallism on account of the expense believed to be involved. If that were to be the case, it might be right, from motives of expediency, to give way to a certain extent on the question of the ratio. But France cannot claim this concession on the grounds of equity, and the amount of the concession must be measured solely by the strength of our desire for the establishment of bimetallism for other reasons.

Thus, in considering the question of the ratio with reference to the money value of the existing silver currencies, the balance of argument is in favour of $15\frac{1}{2}$ to 1 as far as France is concerned, and in favour of the market ratio,* if the question is regarded from an English point of view. But it is to be noted, though the subject is not now under discussion, that as compared with monometallism, the only argument that can be founded on these considerations against market-ratio bimetallism is that it might possibly necessitate a more or less heavy expenditure, in order to bring up some of the existing token coinage to its full metallic value.

If we are to view the matter from a national standpoint, we must consider the way in which the lowering of the value of gold will affect foreign remittances. Every year Great Britain receives immense sums of gold, or the value of such sums in goods, in payment of the interest on loans to foreign Governments, and on other investments out

Thus, with reference to the coinage only, France would prefer the low, and England the market ratio.

The low ratio would lower the value of the interest on foreign loans received by England;

of the United Kingdom. Lower the value of gold, and we shall as a nation be proportionately poorer, as far as this source of income is concerned. From motives of self-interest we ought, on this ground, to be opposed to low-ratio bimetallism, and to this argument the only reply that can be made is, that in great movements of this kind, we ought to sink our national interests for the common good. This, no doubt, would be the most high-minded policy to adopt; but each nation must consider its own well-being first of all, and it could not even be suggested that we should neglect the consideration of any of our own interests, unless the case for this reform on other grounds were proved up to the hilt. Moreover, we can hardly be asked to abandon the study of our own national gains and losses, and only to consider the damage that might be done to our neighbours by any proposed currency reform. If we are to dismiss the consideration of our foreign loans, France and the United States must give up any arguments founded on their over-valued currencies.

but it
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lessen the
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India, for
which
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may be held
responsible.

There can be no doubt that if the introduction of low-ratio bimetallism would injuriously affect Great Britain as far as foreign debts are concerned, it would in a similar way be a great benefit to the Government of India. If the value of silver as compared with gold were more than doubled, the burden of indebtedness would be enormously decreased in countries like India before 1893, where the taxes are raised in silver, and the national debts paid in

gold. The effect of the recent fall in the gold price of silver has no doubt been to greatly increase the strain on the resources of India due to her gold debts. In all probability the financial troubles of our great dependency would not have been so great if the Indian Government had raised the money they wanted by silver loans; the interest in that case would have been higher, but the full burden of the debt would have been apparent at once. The cause of the higher rate of interest paid at present for loans raised in silver, in comparison with those raised in gold, is the fear that financiers always have before them of a further depreciation in the gold price of silver, and of the consequent fall in the value of the fixed silver interest when paid in English currency; and if this higher rate of interest had been paid, the excess might fairly have been regarded as an insurance against the fall in the rupee. The Government, rightly or wrongly, did not care to pay the insurance demanded, and the loss now therefore falls on them. As the British Government, representing the British people, are the autocratic irresponsible rulers of India, a plea may be urged that we, as a nation, are responsible for this blunder, and that we, the gold-using country, ought not therefore to object to having our gold reduced in value in order to lessen the burden of this gold debt on the people of India. But if the case is clear enough to serve as the foundation for such an argument as this, it is clear enough to act as the basis for a demand for a

direct money subvention from us, especially as such a subvention would be the cheapest way of discharging this moral liability, if it be one. A direct money payment to India would benefit that country alone, whereas, by the bimetallic method of settling the question, we should be incurring a sacrifice for the benefit of many other silver-using countries, for whose financial administration we are in no way responsible. And, as far as her national interests are concerned, England would, I believe, be wise if she were to give this financial assistance to India, rather than in any way to encourage low-ratio bimetallism. But, looking at the question from a more practical point of view, the Government of India may well feel that it would be impossible to extract any money from the English taxpayer on such theoretical grounds as these; and they may, therefore, desire to reduce the burden of natural indebtedness by the introduction of low-ratio bimetallism.¹

But the evils of an appreciating currency must not be forgotten.

It must not, however, be forgotten that there will be compensating disadvantages to silver-using countries accompanying such a reform. It will be seen in the following chapter, and in Chapter XVII., that the effect of low-ratio bimetallism would probably be to raise the value of silver, and thus to depress trade in silver-using countries. And, even if the question is regarded from the point of view of the Government rather than from that of the

¹ A recent despatch proves that this is not the view of the present Government of India.

people, the gain arising from the change in the ratio will not be an unmixed one. If the value of silver rises, there ought to be a corresponding decrease of expenditure reckoned in silver currency. Such a reduction would not, however, take place for a very long time in certain articles of expenditure; as, for example, in the pay of the native army. And whatever proportion of the national expenditure remains constant in money value, that proportion must increase in real value; and the revenue for such purposes must press more heavily on the people, and be more difficult to collect. Thus, on the whole, it may well be doubted whether India would not be injured rather than benefited by the adoption of any ratio approaching $15\frac{1}{2}$ to 1.

Many of the foregoing arguments merely indicate the balance of certain advantages and disadvantages which would be experienced by different nations on the introduction of low-ratio as compared with market-ratio bimetallism. If these were the only points to be considered, it would be hopeless to endeavour to negotiate the necessary international agreements. Strong arguments must be forthcoming, in favour of one proposal or the other, which are applicable to all nations, if either system is to be brought within the range of practical politics.

It will be remembered that we divided the aims of bimetallists under two separate headings, and that of these, the first was to make prices more steady, both by maintaining a constant rate of exchange between countries using gold currencies and those

The question of the ratio cannot be settled by national considerations like the above.

Nor does the consideration of the instability of foreign exchanges

help to
solve the
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using silver currencies, and by lessening the fluctuations in the value of money. We should first, therefore, inquire which ratio would be most likely to produce beneficial results in the way thus anticipated. What bimetallists hope to do is to tie the two metals together, so as to destroy the influence which the variations in the relative value of silver and gold have on foreign exchanges, and in order that one metal may act as a check on any oscillations in the value of money due to causes affecting the other metal only. The variations in the rate of foreign exchanges depend on several causes; in so far as the instability is caused by alterations in the balance of international indebtedness, no permanent benefit will be derived from any currency reform; but in so far as it is due to fluctuations in the relative value of gold and silver, and the consequent variations in the rate of exchange of gold and silver moneys, stability will be insured by any fixed ratio of value being established between the metals; and it is of no consequence, as far as this consideration is concerned, what that ratio may be. The discussion of the question as to which ratio is likely to reduce the fluctuations in the value of money to a minimum, may conveniently be postponed for the present;¹ but at a later stage it will be seen that the arguments founded on such considerations, whether valid or invalid, are, at all events, not likely to form the basis of a popular demand for the one system of bimetallism rather than for the other.

¹ See p. 90.

CHAPTER V.

THE MAIN OBJECT OF ADOPTING A LOW RATIO
IS TO RAISE PRICES.

IF we are to find the real basis of the demand for low-ratio bimetallism, we must pass on to discuss the second group of objects aimed at by bimetallists. The main desire of many of those who advocate this system of currency is, no doubt, to raise prices in gold-using countries, and thus to stimulate trade, especially the trade with countries having a silver currency.

The object of low-ratio bimetallism is to raise prices.

Would low-ratio bimetallism cause an immediate rise in prices? This is the first question that naturally presents itself, and, on this point, it has already been shown that forces would be set at work which would tend to bring about that result in gold-using countries. But other forces might also be brought into play which would act in the opposite direction. For example, the fear of a sudden alteration in the value of money might cause great commercial confusion, shaking credit, and bringing down prices with a run; though bimetallists think that this danger might be avoided by making the

The low ratio would probably raise prices, and this reform will now be discussed on the assumption that it would do so.

change a gradual one. Whatever might be the immediate results, I cannot doubt that prices would rise eventually. But assuming, for the sake of argument, that this is a mistaken assumption, and that, as a fact, prices would not rise, then any argument founded on the hope of their rising is completely annihilated. If, on the other hand, we assume that prices would rise, and if, arguing the case on this assumption, we are driven to the conclusion that it is not desirable to raise prices artificially in this way, we then destroy this argument in favour of low-ratio bimetallism, whatever might, in reality, be its immediate effect on prices.

The low ratio cannot be claimed as a just compensation by debtors for the injury done to them by falling prices ;

Assuming, then, that prices would be raised by such a system of bimetallism, what we have to discuss is the question whether it is desirable to raise them in this manner. The case can be argued on the grounds either of justice or of expediency. To deal with the question of justice first, the case for the low-ratio bimetallists may be stated thus. If prices have fallen owing to the increase in the value of gold caused by the increased demand due to legislative changes, "it follows that just so far as debtors have been prejudiced by currency legislation since 1873, to that extent and no more will they be benefited by the adoption of bimetallism at the old ratio of $15\frac{1}{2}$ to 1; and to that extent it may," it is urged, "be said that an act of justice would be done."¹ It is true, no doubt, that in 1873 France

¹ "A Bimetallic Primer," H. C. Gibbs, p. 52.

and the other nations included in the Latin Union commenced the abandonment of their bimetallic system, with its free coinage of silver at a ratio of $15\frac{1}{2}$ to 1, and also that there has been much important currency legislation on the Continent during recent years, all tending to a lessened use of silver. Reasons will be given later on for believing that these changes, by increasing the demand for gold, and thus raising its value, did influence prices; but it is a most startling doctrine that one party to a contract made in England between Englishmen has equitable grounds for demanding that his contract shall be modified to the disadvantage of the other party because of the effects of foreign legislation. Yet, no doubt, the effect of contracts would be modified if prices were raised by means of low-ratio bimetalism; for the value of money depends on the commodities it will purchase, and raising prices is equivalent to reducing debts; the debtor, who would find money more easily made, would gain, and the creditor, whose money would purchase less, would lose. But if we look more carefully into the claim it becomes still more surprising. All that can possibly be urged is that by now adopting a low-ratio bimetallic system in Europe, we should produce the same state of things which would have existed if the Latin Union had never abandoned bimetalism, and if England had adopted it some twenty years ago; in fact, the debtor, in a country which has been strictly monometallic for nearly a century, is demanding compensation for the

for, *inter alia*, many existing debtors have not been injured by that fall.

fact that bimetallism was not adopted in England at a particular epoch. Was ever such a plea urged before? But even granting that such compensation can justly be demanded by the debtor; granted also, that no creditor has any right to demand that the rise in prices between 1850 and 1873 shall be taken into consideration; what justification can be given for the interference with debts which either have recently changed hands, or have been recently contracted? In the first case, the person benefited will not, even on the bimetallic hypothesis, be the person who has any claim for compensation. And as to the recent debtor, he will gain just as much as the debtor of twenty years' standing by the introduction of low-ratio bimetallism, though he will not have been in the slightest degree injured by English or foreign legislation; in his case also there is, therefore, not a shadow of justification for the demand for compensation. Whenever one man is thus benefited, another man must be injured, and, looking to all these different possibilities, bimetallists must admit that the number of creditors who would thus be inequitably injured might exceed the number of debtors whom they would consider to be justly compensated. It does not seem possible, in fact, to sustain this plea for low-ratio bimetallism.

In discussing the advocacy of low-ratio bimetalism on the ground that it would be an act of justice, we have tacitly admitted the bimetallic contention that the recent appreciation of gold has

resulted from currency legislation on the Continent. No point has been more keenly discussed in this controversy than the question whether the fall in prices since 1873 has been due to causes primarily affecting gold or to causes primarily affecting commodities. One of the commonest arguments in favour of the belief that low-ratio bimetallism will cause prices to rise is founded on the fact that prices have fallen heavily since the abandonment of bimetallism by the Latin Union; if, however, it could be proved (contrary to my belief) that this recent fall in prices was in no way connected with currency legislation, of course the expectation of a rise of prices at the reintroduction of bimetallism would be greatly lessened, and the plea for compensation for the injury done by such legislation would be entirely destroyed. We are here, however, assuming for the purposes of argument that prices would, as a fact, rise, and this point need not, therefore, now be discussed.

It is to be noted that the above arguments only prove that the low ratio cannot be *demande*d on the ground of abstract justice; they do not tend to show that this reform should be *resiste*d because of its unjust effects. Most reforms cause some suffering to individuals, and, although that suffering should be duly weighed in considering the advantages and disadvantages of any proposed legislation, it must not be allowed to bar the way to all progress. Reforms which will benefit communities for all time must be judged on wide

On the other hand, bimetallism should not necessarily be opposed on equitable grounds.

national grounds, without too sensitive a consideration for personal hardships.

The question must also be discussed on the grounds of expediency.

In passing on to consider the demand for low-ratio bimetallism on the grounds of expediency, we need pay less heed to the causes which have recently influenced prices, and we may confine our attention to the effects of the proposed legislation; because the expediency of any action must be judged entirely by its probable effects.

Assuming that prices will be raised by the low ratio, it is almost certain that trade will also be stimulated.

On the assumption that low-ratio bimetallism will force up prices, what we now, therefore, have to consider is whether it will also stimulate trade; and, if so, whether such stimulated trade will in reality be beneficial to the nation. This subject will be discussed at length in Chapter XVII. Here, perhaps, it will be sufficient to quote the statement of Jevons, that the fall in value of gold due to the Australian discoveries had "a most powerfully beneficial effect." Such a fall "loosens the country, as nothing else could, from its old bonds of debt and habit. It throws increased rewards before all who are making and acquiring wealth, somewhat at the expense of those who are enjoying acquired wealth. . . . All this is effected," if the fall comes from new discoveries of gold, "without a breach of national good faith, which nothing could compensate."¹ The assumed effect of low-ratio bimetallism would be in many respects similar to such a fall in the value of gold, and it seems almost certain, therefore, if prices are raised, that trade will

¹ "Investigations in Currency and Finance," pp. 96, 97.

be stimulated. Raising prices is the same thing as lowering the value of the standard; and lowering the value of the standard must reduce the burden of fixed debts payable in that standard, and thus set free capital which can be used to promote further production. The probability of these beneficial results is, however, far from proving the wisdom or expediency of introducing such a system.

The effect of lowering the ratio between the two metals must be considered with regard to silver, as well as with regard to gold-using countries. Those who advocate bimetallism from a cosmopolitan point of view, must select their arguments very cunningly if, whilst proving that benefits are to be expected from the assumed rise in prices at home, they do not show that it is highly probable that the same causes will result in a lowering of prices in silver-using countries, to the injury of their inhabitants. In the same way that lowering the value of gold will ease the burden of fixed debts at home, the effect of raising the value of silver will be to increase the pressure of silver debts in silver-using countries, thus throwing an increased burden on those carrying on ordinary commercial transactions. To raise prices, by means of low-ratio bimetallism, would undoubtedly, in this respect, be a benefit to the English manufacturer; but, if it is necessarily accompanied by a lowering of silver prices, would it not as certainly be a disadvantage to those carrying on business in a silver-using country?

But in silver-using countries prices may be lowered and trade depressed.

It is, however, denied that silver prices would fall.

It is, however, denied that the effect of bimetallism would be to lower prices in silver-using countries; if, it is urged, prices in India did not commence to rise in any marked manner at the time when bimetallism was abandoned on the Continent, there is no reason to suppose that they would begin to fall at the re-establishment of that system. There is some force in this argument. There are reasons, I think, for believing that the fall in prices in silver-using countries at the introduction of low-ratio bimetallism would be less than the rise in prices in gold-using countries. The ratio would be adjusted by silver being taken from the market for coinage purposes, thus raising its value as an article of merchandise; and by gold being driven out of, or diverted from, the currency into the market, thus lowering the value of that metal. Now if the rise in the value of silver due to the subtraction of a given value of that metal from the market would be less than the fall in the value of gold due to the same value of gold being thrown on the market, then it follows that, in the adjustment of the ratio, the fall in the value of gold would be greater than the rise in the value of silver; and considering the glutted state of the silver market, this would, I believe, probably be the case. There is, therefore, some reason to believe that the prices in silver-using countries would not fall at the introduction of low-ratio bimetallism as much as would at first sight appear probable.¹

¹ Probably the fall in the gold price of silver, which has

But in considering the effect of the change in the ratio on our commerce with silver-using countries (a subject to be discussed at greater length in Chapters XXI. and XXII.) we must look on them in two capacities—that is, both as rivals and as customers. As rivals, the more their commerce is injured, the better for us. If the value of silver does not rise when low-ratio bimetallism is being introduced, it is true that there will be no reason for an actual depression in trade in silver-using countries. But, in that case, it is evident that the value of gold must fall all the more in order to bring about the necessary adjustment of the ratio; and trade in gold-using countries will be subject to a proportionately greater stimulating influence. Thus the relative advantage to gold-using countries in this competitive trade, which would accompany a given change in the ratio, would be much the same whether silver did or did not rise in value; for it is the relative inflation or depression of the trade of the two countries which has to be considered. Silver-using countries, if regarded as rivals in trade, would, therefore, in any case be injured by the adoption of low-ratio bimetallism. And bimetallic members of Parliament, who remember with appreciation Sir Henry Fowler's eloquent appeal to them

Silver-using countries, if regarded as rivals, would in any case be injured by the low ratio;

occurred *since* 1893, would be easily reversed by the reopening of the Indian mints. But internal silver prices in China and Mexico, the only large silver-using countries now remaining, have probably not yet risen in comparison with gold prices in proportion to this fall in the gold price of silver.

to look upon themselves as members for India, would, I imagine, feel very uncomfortable in voting for any currency reform which would injure Indian commerce by giving a stimulus to British competition, unless the plea of justice on which it was demanded was based on very sure foundations.

but as regards the bulk of their trade there are reasons to believe that the injury would not be very serious.

Any stimulus to trade in gold-using countries will create fresh demands for imported goods, and this demand will produce a corresponding though much slighter stimulating effect in silver-using countries. This is, I believe, strictly true in so far as silver-using countries are to be regarded, not as rivals, but as customers; and that is certainly the more important aspect of this branch of international trade. Granted that this is the case, silver-using countries would have no cause of complaint, in this respect, on account of the inflation of trade in gold-using countries due to any fall in the value of gold. As to the internal trade of silver-using countries, the less silver prices are forced down by any currency reform, the less their trade will be depressed, and the less reason they will have to complain. The reasons just given for disbelieving in a heavy fall in silver prices at the introduction of low-ratio bimetallism have therefore an important bearing on this question. Then again, it is to be noted that the depressing effect due to any fall in prices which might take place would be in consequence of the way in which both the burden of industrial debts and the rate of real wages would increase at such times (see Chap. XVII.). But in the less

civilized silver-using countries such influences as these would have less effect than under the complex industrial systems of gold-using countries; and silver-using countries would therefore suffer less from a fall in prices than would appear probable judging from the experience gained in gold-using countries. All these circumstances mitigate the injustice which it might be anticipated would be done to silver-using countries by the introduction of low-ratio bimetallism; though they do not prove that no harmful effects would follow that reform.

As to India, she can no longer be regarded as belonging to the category of ordinary silver-using countries. By closing her mints to the free coinage of silver, the value of the rupee has been forced up above the value of the silver contained in that coin; and these monopoly rupees may best be regarded as inconvertible notes printed on silver. It is evident, therefore, that when silver is rising in value, it will not be till the value of the silver in the rupee becomes equal to the value of the monopoly rupee itself that the value of that coin will tend to rise, or that prices measured in rupees will tend to fall.¹ A certain increase in the value of silver would therefore do no harm to India. Moreover, it would be very difficult for the Government of India to adopt any bimetallic system which did not raise the gold price of silver to the level at which they have succeeded in maintaining the gold price of the monopoly rupee. Their object in

India could not accept market-ratio bimetallism, and this is the strongest reason for a compromise on this question.

¹ Assuming that a gold standard is not adopted.

closing the mints has been to lessen the burden of the gold debts of India; and from that policy they are not likely to recede. They cannot, therefore, well accept market-ratio bimetallism, or indeed any form of bimetallism which would lower the gold price of the rupee; for to do so would certainly increase the amount of the silver revenue necessary to meet the interest on the gold debts of India. This consideration, taken in connection with the facts mentioned in the preceding paragraph, appears to me to afford the only strong argument in favour of adopting a bimetallic system with a ratio somewhat lower than the ratio now ruling the market. But, as previously stated, the balance of argument as regards India is, I think, very strongly against bimetallism with a ratio anywhere nearly approaching the ratio of $15\frac{1}{2}$ to 1; for, though the value of her gold debts would thus be greatly reduced, yet the depressing effect on silver prices of such a reform, and the increased difficulty of raising a given revenue in silver, would more than counterbalance any such advantage to India.

The rise in prices in gold-using countries will produce no permanent beneficial influence.

Returning to the consideration of the case of gold-using countries, the most important fact to remember is that probably little or no absolutely permanent effect, and certainly no permanently active influence on trade will be produced by the immediate rise in prices due to the introduction of bimetallism at any fixed ratio. The stimulus will become less and less the more nearly we approach a position of stability of prices; and, though it may hasten the progress

of commerce, it is not improbable that trade would ultimately reach almost the same position without such artificial means being used to force it on. "Of course it cannot matter," as is admitted by bimetallists, "whether prices are permanently high or permanently low, for commodities are exchanged against commodities";¹ and, therefore, though it might be a long time before prices ceased to rise slowly in consequence of any currency reform, and before all the other incidents of production had adjusted themselves to the new level of prices, yet, when they had done so, the direct beneficial influence of the rise in prices on trade would have ceased to be operative. This argument applies with equal force to our foreign as to our home trade. Low-ratio bimetallism has been advocated, as we have seen, because it is hoped that it will produce an opposite effect to that resulting from the gradual fall in the gold price of silver. But "it would appear to be admitted, by almost all witnesses" before the Gold and Silver Commission, that when the adjustment between the levels of prices in silver and gold-using countries "has been completely carried out, the conditions of international trade will be precisely the same as before the divergence between the values of the two currencies occurred."² It is probably true, however, that no change can take

¹ Address on Bimetallism to the London Institution. H. C. Gibbs, May, 1895.

² Gold and Silver Commission, p. 35.

place without leaving some traces behind it; but the relics of the inflation would in most cases be insignificant. Thus, putting aside all the many other causes affecting commerce, when the adjustment of all the factors of trade after the introduction of bimetallism had been completed, the conditions of international and home trade would be almost precisely the same as at present; though it is fair to admit that it would be a very long time before this adjustment would be *quite* completed. Bimetallists have, as a rule, advocated their proposed system on the ground that it would increase monetary stability, but here we see they are demanding an unstable condition of things, with the expectation that the adjustment of the instability, so long as it continues, will have a beneficial influence. "Stability should be the great object of all proposals for monetary reform,"¹ and the nearer the ratio adopted is to the existing ratio, the sooner* must stability be reached.²

But even if the first influence on trade of such

The stimulus may be followed by a reaction;

¹ "A Bimetallic Primer," H. C. Gibbs, p. 43.

² It should, however, be noted that if the causes of the recent fall in prices have not yet produced their full effects, it is evident the fall will continue even if we fix existing currency conditions as far as possible—even if the market ratio is adopted. This, therefore, gives a logical argument in favour of some compromise on the question of the ratio. If our object is to steady prices, and not to raise or lower them, we should adopt the ratio which would tend to produce the existing actual level of prices as its ultimate or normal effect; and this ratio may be presumed, on this assumption, to be somewhat lower than the existing ratio.

a rise in prices were beneficial, it is by no means certain that the total effect would not be harmful. If this artificial stimulant did produce exceptional activity, a reaction would almost certainly follow, and the evils of the depression might more than counterbalance the good produced by the "over production." Those who believe that this would be the case must admit that it affords a strong argument in favour of steady as against inflated prices. At all events, the probability of a reaction must be taken as a set-off against the advantages claimed for inflation.

Then again, we must ask whether a passing stimulus to trade will benefit all classes. Putting aside all those living on fixed incomes, who must suffer from a rise in prices, and whose sufferings it is not now the fashion to consider, and looking only to those who are working for their livings under conditions which make a rise of income possible, it is at first sight natural to suppose that they all must gain by the change; but this answer cannot be given with certainty. If the production of luxuries for the many is stationary, whilst the production of luxuries for the few increases largely, we can, at all events, imagine an increase of trade taking place unaccompanied by any general increase of comfort, or even accompanied by a decrease of comfort to the many on account of the necessarily increased labour. If the working classes are not to be injured, either their wages must rise in proportion to the rise in price of the commodities they buy, or else the greater regularity of their work must augment their

and the
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doubtful.

total earnings sufficiently to compensate them both for the extra work and for the lessened purchasing power of each day's wage. Can either of these results be predicted with any degree of certainty? In the case of a durable increase in the volume of trade, it can hardly be doubted that a large proportion of the increase of production would before very long find its way to all classes. But when the rise in prices is spasmodic, possibly creating a harmful reaction, this result cannot be said even to be probable. It is easy to see that the owners of industrial concerns might be able to expend more on luxuries out of their increased profits due to higher prices; but it is not clear that the unorganized and casual labourers and employees, who form the majority of the working classes, would be able, before the reaction commenced, to force their wages up so as to gain a proportionately increased margin of expenditure. Moreover, strikes frequently accompany the raising of wages, and on this point it is interesting to note that Jevons stated that "it is not unlikely that the great strikes which occurred a few years ago were partly caused by the depreciation of gold" due to the Australian gold discoveries. We must not judge these questions solely with reference to the total wealth acquired. Even if we go so far as to admit, with Jevons, that "the wealth created during such a period of unwonted activity probably far overbalances any loss which follows,"¹ we may also urge, as far as the

"Investigation in Currency and Finance," Jevons, p. 29.

mass of the people is concerned, that the want and suffering caused by even a moderate period of depression is a heavy penalty to pay for the enjoyments obtained by the often improvident expenditure during seasons of inflation. Wages will keep oscillating, but the social advancement of a nation depends on the low tide rather than on the high tide of the real value of the earnings of labour; and we must be satisfied that the net gain of wealth from inflation, after deducting the "loss which follows," is sufficiently great to permeate even to the ranks of unorganized labour before we can be certain that the results experienced during the period of disturbance will, on the whole, be beneficial. In Chapter XVIII. the reasons for thinking that too great a rise in prices is always objectionable will be discussed at greater length. Here it is sufficient to remark that it is by no means clear that a violent stimulus to trade, such as that resulting from the introduction of low-ratio bimetallism, would be a benefit to the working classes.

Thus far reasons have been given for thinking that it is not certain that the whole community would be benefited by a temporary inflation of trade.¹ But, putting aside these doubts, we must remember that the mere proof that beneficial results will flow from any act is not enough to prove its expediency. There is many an individual whose removal from the

Confidence
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and ob-
jectionable
arguments
endorsed.

¹ The word "temporary" is here and elsewhere used in a sense opposite to that of "permanent" or "perpetual;" and not as indicating duration for a *short* time only.

world would be an unquestionable and undoubted benefit; but that does not, even in such a case, make murder expedient. Putting morality aside, the practical objections to such a crime are that the fear of a repetition of the deed creates a general feeling of insecurity, and that a first offence in many ways greatly facilitates a second, when the victim may not be chosen on such sound principles. Exactly the same type of arguments can be brought against any currency reform, which is demanded on the ground that it will benefit the general community at the expense of a minority. We cannot be certain that the evils due to permanent apprehensions of further arbitrary changes in the effect of contracts would not more than outweigh the benefits due to any temporary inflation of trade. Then again, if we once give way to the temptation to raise prices artificially, we shall find it far harder to resist similar movements in future. If we admit the force of the arguments in favour of thus stimulating commerce, we must also admit the validity of many of the reasons which could be brought forward in support of any proposals for tampering with the coinage, or for the partial repudiation of national debts; and if a bimetallic system should ever be introduced, we should have to admit nearly all the pleas which might be urged in favour of a further reduction in the ratio. We should thus find our power of opposition to all these proposals greatly weakened.

The
"climb-

The want of fixity of the bimetallic ratio is, at all

events, no fancy danger, for we have already heard of arguments being advanced in favour of "bimetalism on a climbing ratio," without any definite reason being given why the ratio should be prevented from climbing above any fixed limit. And this climbing ratio—or falling ratio, as I should prefer to call it—is a perfectly logical outcome of the contentions of low-ratio bimetalists. They declare that years of depression have been caused by a continually increasing divergence between the values of the metals, and they want to reverse the operation; but to make the ratio between silver and gold give a sudden jump from that now ruling the market to a ratio of $15\frac{1}{2}$ to 1, would in no sense be a reversal of this process. If low-ratio bimetalists intend to obtain a long period of commercial activity to correspond to the long-drawn-out depression, their policy should be to obtain, under a climbing-ratio system, a period of instability lasting as long as possible. Establish bimetalism with the hope of inflating trade, and we shall never feel that we have reached finality until, indeed, the ratio is so low that gold is entirely driven out of circulation, and we have practically obtained a silver monometallic system. If we desire stability or finality, we must at the outset resist any attempt to adopt bimetalism with the view of raising prices.

CHAPTER VI.

FREE COINAGE OF SILVER IN THE UNITED STATES.

If free coinage in the U.S.A. established the parity in the market, it would simply be low-ratio bimetallism ;

BEFORE passing on to consider any further arguments in favour of low-ratio bimetallism, it may be as well here briefly to allude to the monetary situation in the United States. In that country one of the great political parties has adopted the free coinage of silver at a ratio of 16 to 1 as a plank of its platform. If it is thus intended to introduce a low-ratio bimetallic system, all the arguments brought forward in the two preceding chapters against that proposal are applicable in this case. But in these discussions it has been assumed that the legalized ratio would coincide with the ratio between the value of the metals in the market. Would this be the case if the United States alone were to commence the free coinage of silver at 16 to 1? Nothing is so rash as to prophesy on currency questions, but it does seem probable that silver would not rise in gold price to that extent. If such legislation were ever passed in America, we may be certain that a force would be established tending to drive gold out of the United States ; and that any

gold flowing to Europe would tend to increase the gold currency in gold-using countries and thus to raise gold prices, including the gold price of silver. The gold leaving the American currency and reserves would be replaced by silver, and the increased demand for silver thus caused would tend to raise its value and therefore its gold price. Would these two movements raise the gold price of silver until the ratio in the market became 16 to 1? If the proposed legislation really produced that result, and the ratio of 16 to 1 was maintained in the market, then the United States would, in future, play the same part that France and the Latin Union played before 1873; that nation alone would control the relative value of the two metals throughout the world by its bimetallic laws. The advocates of this policy declare that the United States is certainly as able to do this now as France was able to do it in the past. If this is really the case, then the proposed American reform would simply be the establishment of low-ratio bimetallism, and we must judge it accordingly.

But on the whole it appears improbable that the action of the United States alone could have the desired effect on the relative values of the precious metals. If it be a fact that France and the Latin Union could have maintained the ratio of $15\frac{1}{2}$ to 1 until the present day, then it is no doubt *possible* that the United States might now be able to establish the ratio of 16 to 1 in the market; but, even on this assumption, we cannot say that this is more than

but if that
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metallism.

a possibility. Thirty years ago it was generally believed that the parity of exchange between the metals would always be approximately maintained, and that belief was a force which may then have helped to make the bimetallic laws more effective. That force is now non-existent. Moreover, to suddenly alter the ratio from, say, 35 to 1 to 16 to 1 is a very different operation from preventing that ratio from altering after it has once been established. Many bimetallicists consider that the Latin Union alone could hardly have maintained the old ratio approximately unaltered in face of the many forces recently arrayed against silver; and nearly all European bimetallicists think that it would be unwise to attempt to introduce a bimetallic system without an international agreement comprising many of the principal commercial nations. Thus even keen bimetallicists may logically anticipate that the value of the American dollar would sink until it coincided with the value of the silver metal in the coin, and this without the gold price of silver rising until the ratio became 16 to 1. If these anticipations are correct, the parity in the market would not be established; gold would cease to circulate as legal tender in the United States; and the currency would consist of one metal only. In fact, the reform would not be bimetallicism at all; it would be silver monometallism, combined with a sudden drop in the value of the standard coin.

If France were to join in this bimetallic movement, no doubt the success of the enterprise would

be more probable. But even in that case grave doubts may well be entertained as to whether the selected ratio could be *maintained* in the market in the face of the probably greatly increased production of silver.

It has been seen that bimetallic legislation would, in any case, produce a tendency for gold to depreciate and for silver to appreciate. If the legalized ratio were not established in the market, it would be because the depreciation of gold and the appreciation of silver were not sufficient to produce that result; that is to say, the value of gold would not be as much reduced as if a true international bimetallic system were successfully adopted. Thus, with this nominal bimetallism, the diminution of the value of debts payable in gold, including much of the indebtedness to Europe, would be less than under international bimetallism; this, however, would be an unintentional result of the free-coinage policy, and one for which the authors of the scheme can take no credit. The great bulk of the debts of a nation are, however, contracted in legal tender, and are not payable in a definite metal; and it is to these obligations that the American citizens should turn their main attention. If the bimetallic ratio were not established in the market, the value of silver would not rise so much as if that result were obtained; the fall in the value of the dollar would be even greater than if a true bimetallic system at 16 to 1 were successfully introduced; and, putting aside the results of the

This spurious bimetallism would affect gold debts less and silver debts more than true bimetal-
lism.

commercial panic which such a reform would certainly produce, it would seem that prices would be raised even higher than if the parity of the metals was established and maintained. Thus those who think it right to attempt to raise prices in this manner have theoretical grounds for hoping to achieve their ends even more effectively, as far as internal debts are concerned, by this kind of nominal bimetallism than by means of a currency system which succeeded in maintaining the adopted ratio in the market; but to those who think such methods should be condemned, this proposal will appear doubly objectionable.

The plea for bimetallism on the ground of abstract justice is somewhat stronger in the case of the United States.

It is true that the demand for the joint standard on the grounds of abstract justice is somewhat stronger in the case of the United States than it is with the United Kingdom, where bimetallism was abandoned in 1816. Had no changes in monetary laws been made in 1873 and in subsequent years, the currency of the United States would now be bimetallic; and, as regards all debts contracted before that date, bimetallism would merely re-establish the legal conditions in force at the time at which such debts were contracted. But, even in the case of the United States, it is, I think, undoubtedly true that the great majority of existing debts were contracted since the abandonment of bimetallism; and that the number of creditors inequitably injured would exceed the number of debtors who could, adopting the bimetallic view of equity, be said to be equitably compensated. With regard, also, to

debts contracted in the bimetallic times, previous to 1873, it must be remembered that the majority have changed hands in the interval, and that the price paid was based on the belief that the Government intended to maintain the existing condition of things; the purchasers would, therefore, be just as much injured by a reduction in the value of the dollar, and almost as inequitably, as if the debt had been contracted recently.

Of course if on the establishment of low-ratio bimetallism the ratio was not maintained, then the dollar would cease to retain its present gold value. But this does not very materially alter the case from an equitable point of view; because, if the United States could not now establish the parity between the metals, it is most probable that, had the old bimetallic laws remained in force, the dollar would now have sunk to its value in silver. In that case, also, it would therefore be true that the free coinage of silver would, as far as a large number of debts is concerned, merely be a return to the conditions which would have existed if no change in the monetary laws had been made; and it makes the matter little if any worse from the point of view of abstract justice. But these considerations do illustrate, and illustrate very forcibly, the dangers of low-ratio bimetallism. For here we see that an arbitrary reduction of internal debts to an unknown amount, possibly rising to a maximum of nearly fifty per cent., can be defended by much the same arguments as those which must, I think, be used by

The free-silver policy illustrates the dangers of low-ratio bimetallism.

low-ratio bimetallists. And do not let us imagine that in England we are free from such dangers ; for here in past times we have heard "arguments in favour of the change to a silver standard, which are neither more nor less than pleas for depreciation, and consequently for debtors generally at the expense of their creditors, in violation of the broadest principles of justice and sound policy." ¹

¹ Tooke's "History of Prices," vol. iii. p. 215, 1840.

CHAPTER VII.

ARGUMENTS IN FAVOUR OF A LOW RATIO.

It has been urged in favour of the low, or the $15\frac{1}{2}$ to 1 ratio, that the total amount of silver now in existence in the currencies of the world weighs $15\frac{1}{2}$ times as much as the total gold coinage, and that this, therefore, seems to be the natural ratio to adopt. This is often gravely brought forward as an argument, without the slightest hint being given why there should be any connection between the ratio of the weights and the ratio of the values of the metals. As thus stated, the fact has no more argumentative value than a bad pun. It might, no doubt, be urged that the chance of one or other of the metals being driven out of circulation by unforeseen circumstances would be reduced to a minimum if the currency was equally divided between silver and gold, the metals being measured by their value. Now, if it be a fact that the existing silver coinage weighs $15\frac{1}{2}$ times the existing gold coinage, it is true that, at the first introduction of bimetallism at a $15\frac{1}{2}$ to 1 ratio, the total value of the two metals in circulation would be the same, and we should have

If the silver currency weighs $15\frac{1}{2}$ times the gold currency, this affords no argument for the $15\frac{1}{2}$ to 1 ratio.

obtained this theoretical advantage. But such a ratio would, as we have seen, raise the value of silver as compared with other commodities, as well as in comparison with gold; this would have the double effect of stimulating the silver-mining industry, and of diminishing the demand for silver in the arts; and for both reasons, the amount of silver in circulation would be increased more or less rapidly. Moreover, the amount of gold in circulation would be diminished in similar ways; and the equality of value of gold and silver in the currencies of the world at first obtained would very soon be destroyed. If any weight at all is to be attached to this argument, which is doubtful, it points to the adoption of a ratio higher, but no one can say how much higher, than $15\frac{1}{2}$ to 1.¹

The ratio adopted should be the one most likely to survive, but it is difficult to select that ratio.

It has also been urged that the fact of a ratio between 15 to 1 and 16 to 1 having existed for so many years, points to the conclusion that the safest course would be to go back to the old and well-tried ratio of $15\frac{1}{2}$ to 1. But this is hardly a strong argument in the mouth of a bimetallist; for the

¹ In a similar manner it might be argued that the maximum stability would be obtained if the two streams of metals flowing into the common reservoir were of equal volume; that the value of the total output of silver should be equal to the value of the total output of gold. This would indicate a ratio of 19 to 1, taking the relative output in 1893, 1894, and 1895 as a guide. But this argument, in the same way, in reality only points to some ratio an indefinite amount higher than the ratio of 19 to 1 as being theoretically the best; for, with a ratio of 19 to 1, the output of silver would increase.

continued existence, before 1873, of the low ratio pointed, according to the bimetallic theory, to the continued existence of laws legalizing a low ratio, and not to any inherent qualities in the metals themselves. The ratio to be aimed at is no doubt the one most likely to maintain a large proportion of both metals in circulation; but it is extremely difficult to ascertain what ratio would fulfil that condition. Those who believe in a flood of silver would select a high ratio to check that flood; but those who believe that the production of gold will increase more rapidly than that of silver would naturally endeavour to equalize the output by means of a low ratio. It has been seen that if a bimetallic system were being started in an isolated country without a metallic currency, the natural ratio would be the safest one to adopt. But what is the natural ratio? If all the gold and all the silver coin in the world were demonetized, the natural ratio would then in time be established in the market; but who would venture to predict what would be the ultimate effect on the relative values of the metals of such an event? The gold coinage of the world is now more valuable than the silver coinage, and therefore it might be argued that gold would fall in value more than silver if the whole, or even if an equal proportional part, of the two metals were demonetized; that is to say, that the natural ratio would be lower than the existing ratio. But, on the other hand, the recent rise in the ratio, if due to inherent causes, seems to point to natural forces

tending in the opposite direction. The choice of the best ratio to adopt ought to be largely dependent on the relative cost of production of the two metals, and on this point we are badly in need of more accurate information.

Thus far the balance of argument has been against the adoption of the low ratio, but there are some points in its favour which are well worthy of consideration.

The greater stability of silver prices is said to point to the adoption of the low ratio.

In the first place it is urged that the lower the ratio, the more perfectly will the currency fulfil its function as a standard of value. It is well known that prices as measured by gold—gold prices—have been falling during the last twenty years; and, neglecting oscillations extending over periods of less than five or six years, it also appears to be almost certainly true that prices as measured by silver—silver prices—have been comparatively steady. From these facts it has been argued that silver is inherently a better standard of value than gold, and that the greater the weight given to silver in the bimetallic marriage, the more stable will prices be as measured by the joint standard. The effects of appreciating and depreciating standards of value will be discussed at length in Chapters XVII., XVIII., and XIX.; but, assuming for the present that the fall in gold prices has been too rapid for the well-being of the community, this argument, no doubt, points to a low ratio; for to establish the ratio of $15\frac{1}{2}$ to 1 would undoubtedly encourage the production and coinage

of silver, and discourage the production and coinage of gold. And if a larger proportion of silver in the joint currency will produce a better standard of value, this is a legitimate argument against adopting the market ratio, and one which must be considered.

Bimetallists, as a rule, declare that the fall in the gold price of silver has been due to the increased use of gold and the diminished use of silver on the Continent, and on this point, as will be seen later on, they are probably more or less justified in their conclusions.¹ But when they go on to state that the influences which caused this fall in the gold price of silver have been influences which affected gold and not silver—that gold prices, in gold-using countries, have been greatly influenced, and that silver prices, in silver-using countries, hardly influenced at all by the demonetization of silver in Europe and the United States, they do not support their contentions with solid arguments. It would appear far more probable that prices have been affected everywhere by this currency legislation tending to discourage the use of silver and to encourage the use of gold; that, as a result of other causes, there would have been a more or less considerable fall in prices everywhere, if bimetallism had been effectively maintained, both in silver-using and gold-using countries; that the influence of these alterations in the currencies of Europe and America has been to increase this fall in prices in gold-using countries, and to diminish or cancel it in

If the fall in the price of silver is due either to bimetallic legislation, or to oriental conservatism, the above argument is unsound;

¹ See Chapter XV.

the silver-using countries; and that the steadiness of Indian prices before 1893 may, therefore, be said, in a sense, to be due to the abandonment of bi-metallism in Europe. Moreover, it has been suggested that the greater stability of Eastern prices is partly accounted for by the greater conservatism of the people; but, if so, it is evident that to that extent it has nothing to do with the standard value.¹ And to whatever extent we admit the superior steadiness of silver prices to have been due, either to the abandonment of bimetallism in Europe or to the less advanced methods of trade in the East, to that extent do we destroy the argument that silver ought to be given extra weight in the bimetallic marriage, because of its inherent tendency to produce more stable prices. If, on the other hand, the change in the relative value of the precious metals has been largely due to causes other than the lessened demand for silver and the increased demand for gold for monetary purposes—in fact, that it has been largely due to qualities inherent in the metals themselves—then, no doubt, this argument in favour of silver is logical. But, assuming that the divergence in the value of the metals has been due to such inherent causes, then it seems probable that the present ratio in the market is nearer to the natural ratio than is the

but if it is really due to inherent causes, this fall points to the market ratio being nearer than the low ratio to the natural ratio.

¹ This explanation of the superior steadiness of silver prices might account for it as far as short-period oscillations are concerned; that is, for the kind of steadiness which has not been proved to exist.

ratio of $15\frac{1}{2}$ to 1; and that by adopting the market ratio we shall subject the bimetallic tie to a less severe strain than if we re-establish the ratio of $15\frac{1}{2}$ to 1, and thus reverse the natural process which, according to this view, has been in operation since 1873. In fact, to whatever extent this contention in favour of silver is not fallacious, to that extent an argument pointing in the opposite direction—in favour of the market ratio—has to be weighed in the balance.

The arguments above discussed, as well as some other points which will be considered in this chapter, are all founded on the monetary and mining experiences of the last few years. As to the superior steadiness of silver prices, if we look to more ancient history, it would be difficult to prove which standard has varied most. And such records as are available are not very apposite; for, up till 1873—that is, while any of the great Powers had bimetallic laws in force—such oscillations in the relative value of the two metals as did occur are but little guide as to what would have happened if these imperfect bimetallic ties had not existed. Judging by the past variations in output, it seems probable that each metal, if it remains free, will at some future time, near or distant, tend to appreciate, and at other times tend to depreciate. If this is a true forecast, all that bimetallicists can hope to do is to tie the two standards together, so that, when causes tending to produce instability in the value of one metal only are operative, the tendency of the joint standard to

These arguments assume that the existing conditions of productions, etc., will continue; which is improbable.

vary in value will be mitigated by the weight of the other metal. They can hardly hope to predict what ratio will produce the most stable currency in the long run.

The ratio adopted should be the one producing the greatest annual increment of money, but it is doubtful what that ratio would be.

Other and more weighty arguments in favour of the low ratio can, however, be brought forward, if it be granted, as, I think, the discussions in these later chapters will prove, that a change from stable prices to falling prices is more harmful than a change to rising prices, and that (though this is more doubtful) a currency with a permanent tendency to appreciate is objectionable. The coinage in circulation is always diminishing through wear and tear and loss, and such a diminution of the currency must be a force tending to raise prices. Then again, the natural increase of the population must be accompanied by an increase of money, or else, other things remaining the same, the strain on the currency will increase. An annual increment of metallic money is therefore normally necessary to prevent prices from tending to rise as a result of these two causes; and it would be better to err on the side of too great an increment rather than in the opposite direction, because a rise in prices, though objectionable, is, generally speaking, not so harmful as a fall in prices. Accepting these premises in so far as the effect of the standard of value in the future is concerned, the bimetallic ratio most likely to produce the greatest proportional annual increment of coinage is the one to be adopted. Mr. Foxwell says, that "the fundamental consideration

determining the choice of a ratio is the consideration which ratio is most likely to give us such a supply of money as will duly keep pace with the requirements of advancing population and trade. This is a matter which depends on estimates none of which can be very exact. It seems clear that the higher the gold price of silver the larger will be the available supply of money."¹ And in another place the same author tells us that "it is the opinion of certain experts that a rise in the price of silver in relation to gold would increase its production. But it is very doubtful if any similar effect on the supply of gold would result from an alteration of the ratio in favour of gold." This consideration, therefore, points to the adoption of the low ratio. But if Lord Aldenham, another great bimetallic authority, is right in saying (as I understand him) that any prophecy as to the probable increase of the output of silver on the introduction of bimetallism "is in a great degree guesswork," it would hardly appear that a very forcible argument can be founded on this basis.² No doubt, when capital has been invested in any industrial concern, the undertaking is not readily abandoned even when it ceases to be profitable; and it follows that, if the value of gold were lowered and the value of silver raised by any bimetallic legislation, we might expect that the diminution in the output of gold, through the

¹ National Liberal Club: "Pol. Econ. Circle," vol. ii. p. 194.

² "Colloquy on Currency," p. 73.

abandonment of expensively worked mines, would be a slower process than the increase in the output of silver through the opening of new mines. Low-ratio bimetallism would, therefore, in the first instance, be accompanied by an increased total output of the metals; this would result in an increase in the currency, and it would be an additional reason for anticipating an upward movement of prices in gold-using countries. But, if the ratio of 60 to 1 were adopted, similar results might be expected to follow, except that the increase of production would be in gold and not in silver; and, in this case, the additional production would act as a check on the fall in prices in gold-using countries which would follow such a form of bimetallism. In fact, any departure from the ratio in the market would tend in this way to increase the output of the metals. But in any case the results would be merely temporary; for unprofitable mines would be closed before very long, and the mining industries would gradually accommodate themselves to the new relative values resulting from the introduction of bimetallism; and, after the completion of such an adjustment, I am unable to see why it is thought that one ratio is likely to produce a greater annual increment of metallic money rather than another. But this, no doubt, is a question for experts, and one well worthy of consideration.¹

¹ If I understand Prof. Foxwell's argument right, it is dependent on the assumption that the greater the weight that is given to silver in the bimetallic tie, the less will be the tendency for

In Chapter V. it was seen that the stimulus to trade, due to a rise in prices, on the introduction of low-ratio bimetallism is not a sufficient justification for adopting that system. On the other hand, it has just been admitted that we ought to adopt the ratio which is least likely to cause a continuous fall in prices in the future. These two attitudes may at first sight appear somewhat contradictory ; but they are not so, and the distinction between the two views is important. If prices are raised through the introduction of low-ratio bimetallism, the active beneficial influence will die out in time, and the advantages aimed at are for one generation at most ; the comparatively sudden rise in prices which would probably follow such a reform, would almost certainly be followed by a reaction more or less severe ; and, as there would be a temptation to produce another rise in prices by a further alteration in the ratio, the confidence in the maintenance of the system when adopted would be shaken by the very arguments used in favour of its adoption. But to advocate the selection of a ratio—whatever that ratio might be—which would be most likely to permanently lessen the tendency to falling prices is to seek advantages of a very different order. To prevent prices from permanently declining would

The desire to stop the continuous fall in prices is not inconsistent with the objection to an attempt to inflate prices.

the currency to appreciate, not only in the immediate future, but also in perpetuity. If this is true, does it not follow that there will be perpetual tendency on the part of silver to fall in value as compared with gold ? And if there is such a tendency, bimetallism at a fixed ratio cannot last indefinitely.

probably produce permanent benefits; it could not tend to produce any reaction; and the temptation to a further alteration in the ratio would hardly be stimulated by any arguments based on the endeavour to secure such advantages. If it is true that, after the disturbances due to the reform had subsided, low-ratio bimetallism would be more likely than market-ratio bimetallism to prevent prices from falling, then this is a point in its favour. I do not myself think that much weight should be attached to these pleas in favour of a low ratio, but to say that they are worthy of being weighed in the balance when selecting a ratio is not inconsistent with the attitude adopted in Chapter V.

The effect of the recoinage of silver with a market ratio to be considered.

One other argument in favour of the low ratio remains to be considered. It was seen that the adoption of the market ratio might necessitate the recoinage of a portion, large or small, of the existing silver-token coinage, and that, when re-coined, its nominal value would be diminished. This would be equivalent to a contraction of the currency, and it would, therefore, be a cause tending to produce a further fall in prices—a result certainly not to be desired. My own impression is that very little recoinage would be necessary, and that the consequent fall in prices would be very small.

These pleas for the low ratio are not strong.

In this chapter some reasons have been given for demanding a compromise on the question of the ratio, which are worthy of consideration, although, in my opinion, no great weight should be attached to them.

CHAPTER VIII.

ARGUMENTS AGAINST THE LOW RATIO.

IN considering some of the dangers which would attend a breakdown of a bimetallic system if once established, we may fairly place the advocates of the low ratio on the horns of a dilemma. If trade has not been depressed during the last twenty years, or if its depression has had nothing to do with the abandonment of bimetallism on the Continent, then bimetallists themselves would be the first to admit that their case for the re-establishment of the low ratio would be nearly destroyed. If, on the other hand, we admit that more than twenty years of distress have been due to the action of the Latin Union in abandoning bimetallism, surely it is obvious that we ought to jealously guard against the chance of a recurrence of this trouble. But, if we adopt the ratio of $15\frac{1}{2}$ to 1, we are going to reproduce, as far as possible, the monetary situation which existed in 1873; we are going, in fact, to place the world under financial conditions which would, according to the views of bimetallists, necessitate a breakdown of the system being

If the breakdown of low-ratio bimetalism in 1873 caused a depression in trade, we should guard against a recurrence of that evil.

followed by a long period of commercial depression. This is a risk that must be considered, because, since bimetallism is absolutely dependent on international agreements, bimetallists cannot assert with certainty that it would last for ever. Bimetallists admit, as already pointed out, that it is falling prices, not low prices, which do the mischief; if this is so, it is evident that during all this period of falling prices which we have just passed through, forces have been at work tending to readjust the burdens on industry, and that these forces have already neutralized part of the evil effect of the fall in prices. We have, so bimetallists would urge, paid a heavy penalty for the folly of abandoning bimetallism; but surely it would be equally an act of folly to place ourselves in such a position that we might have to undergo that punishment again through no fault of our own. This is a strong argument against low-ratio bimetallism, but it is one which cannot be urged against a bimetallic system if the ratio adopted is that ruling the market when it is introduced. If, in case of the continuance of the existing monometallic system, there are troubles in store for us which might be cured or alleviated by market-ratio bimetallism, these troubles would merely be postponed but not increased by the adoption of that system for a limited period; the return to monometallism after such a temporary bimetallic period would leave us where we are now as far as the ratio is concerned, and the troubles due to a further divergence in the

values of the metals would have to be faced then instead of now. Monometallists may attach little importance to this argument, but bimetallists must, I think, admit that it tells greatly in favour of the market ratio.

Bimetallism once established, bimetallists would evidently look upon its abandonment as a great misfortune, and the greater the probability of permanency, the better, in their opinion, would be the system. On these grounds also the low ratio must be condemned. The monometallic members of the Gold and Silver Commission reported that a stable ratio might be maintained if the market ratio were adopted, but their great authority cannot be quoted in favour of the maintenance of the low ratio, a system which they considered "would be fraught with serious danger."¹ It is, in fact, generally admitted that bimetallism can only be maintained if the ratio adopted does not differ too much from the natural ratio of the values of the metals, and, from this point of view, it would seem reasonable to suppose that bimetallism had a better chance of survival with a market ratio than with a ratio of $15\frac{1}{2}$ to 1. But the arguments in the last chapter show that no very great weight can be attached to this contention, because there may be an ample margin of safety whether we adopt the market or the low ratio, and also because it is very doubtful which of the two is in reality nearer to the natural ratio.

The chief danger of the low ratio will, probably, induce

¹ Gold and Silver Commission, p. 85.

The authority of the majority of the Gold and Silver Commissioners can only be quoted in favour of the possibility of maintaining the market ratio.

govern-
ments to
hoard gold
rather than
silver, and
this would
be an
element
of in-
stability.

lie in the temptation to hoard gold which it will cause. The bimetallic members of the Gold and Silver Commission, whose authority ought not to be lightly neglected, declared that "all inducement to accumulate gold would cease with a return to a stable ratio of value between"¹ the metals; but they may have forgotten that the whole world would not have their implicit faith in the durability of the system. We may well have doubts as to what would happen in reality if a bimetallic system broke down, but we can speculate with far greater certainty as to anticipated effects of a breakdown whilst yet the system remained unshaken; and it can hardly be denied that there would be a general expectation that the abandonment of bimetallism would be accompanied by return to gold monometallism in those countries where that system now prevails, whilst doubts might be entertained as to whether some of the existing silver-using countries would not take the opportunity of adopting gold as their single standard. Arguing from this belief, it would be generally held that the abandonment of low-ratio bimetallism would be followed by a rise in the ratio, leading to a difference in value between the metals as great or even greater than that which now exists. The various governments would, in all probability, believe that if they hoarded silver, they would find, on the breakdown of the system, that the only way they could avoid a loss on that metal would be to convert it into token coinage at a very false ratio;

¹ Final Report of Gold and Silver Commission, p. 103.

and the memory of the present condition of the French currency would be a warning to them not to fall into the trap in which that nation has been caught. But if gold were hoarded instead of silver, the reserves thus accumulated would consist of the metal which, it would be thought, would increase rather than that which would decrease in value on a return to a monometallic system. For this reason it would be thought desirable that the currency should be composed of gold rather than silver, and to bring about that result, greater facilities would, perhaps, be given for the coinage of gold rather than for the coinage of silver; and this might be done in ways difficult to control by international agreement. The fear that other nations were doing these things would make every Government suspicious, and this, in itself, would be an element of instability. If any one of the great Powers had either hoarded a large amount of gold, or had in any way attracted an unusual supply of that metal within its dominions, its Government might be tempted to adopt monometallism, in the hope that this action would break up the Bimetallic Union and destroy the bimetallic tie, and that this would lead to an increase in the value of their gold currency and reserves; this would be especially probable at the commencement of a war, when one or other of the combatants might think they could thus gain a distinct advantage over their opponents. Thus the belief that gold would increase in value at any general abandonment of

bimetallism—a belief which almost certainly would exist—would evidently be a cause of danger to a low-ratio bimetallic system. Whereas, if the ratio adopted was the one governing the market at the time the system was introduced, it would be impossible for any one to predict, after the lapse of a few years, which metal would go to a premium on a return to monometallism; there would, therefore, be no inducement, as far as this consideration was concerned, to hold one metal rather than the other in reserve, and this possible cause of a breakdown would be non-existent.

The low ratio would be more likely than the market ratio to encourage "contracting out."

The anticipation of an increase in the value of gold as compared with silver—that is, in the silver price of gold—at the breakdown of a low-ratio bimetallic system, might also give rise to the practice of making contracts in gold coins instead of legal tender, in order to insure the creditor against any loss in the event of such a breakdown. In these circumstances, gold rather than silver would be held in reserve by all debtors making such contracts, and, if these negotiations were sufficiently numerous, this separate use of gold might drive it to a premium compared with silver. With the market-ratio system, on the other hand, it has been seen that no one could tell which metal would go to a premium at the break down of the system, and the fear of such a possibility would create no special inducement to make contracts in either metal in place of legal tender. It should be noted, however, that as more than 99 per cent. of the monetary transactions in

England are in credit and not in coin, and that as the credit instruments employed, under a bimetallic system, would be based on silver and gold indifferently, the separate use of gold would be attended with considerable inconvenience. For this reason separate contracts in gold would, I believe, be rare under any bimetallic system.¹ But the point of the present argument is to show that if this is a real danger to bimetallism, it is one which would be comparatively little felt if the market ratio were adopted.

¹ About forty years ago, when the same scare prevailed about gold that now prevails about silver, a certain great water-power in Massachusetts was leased at a rent of so many pennyweights of *silver*. The inconvenience of this plan prevented it being common. See Consular Reports, U.S.A., vol. 24, p. 401, 1887.

CHAPTER IX.

CONCLUSIONS AS TO THE CHOICE OF A RATIO.

Summary
of the
relative
merits of
the dif-
ferent
ratios as
regards the
conflicting
interests of
separate
nationali-
ties.

HAVING discussed the merits and demerits of the ratio of $15\frac{1}{2}$ to 1, as compared with a ratio closely approximating to that governing the market at the time of the introduction of the bimetallic system, it only remains to recapitulate the various arguments, and to strike a balance between them. Reasons have been given for believing that a low ratio would in certain respects be advantageous to France, to the United States, and to the Government of India, and disadvantageous to England; and that it would be a cause tending to stimulate or inflate trade in gold-using countries, and to depress it in those where silver forms the standard. Here there is a balance of conflicting interests, and no reasons can be given why one nation or the other should give way, unless it can be proved that by so doing the world at large would be so much benefited, that each separate nation would be indemnified for its individual losses. What, then, are the advantages and disadvantages of the low ratio, which would be applicable to all alike? To answer this question, we find ourselves

involved in the controversy whether it is right and expedient to attempt to stimulate trade by raising gold prices.

In discussing this subject, it was first assumed, for the purposes of argument, that there would be a rise in prices in gold-using countries, if the ratio of $15\frac{1}{2}$ to 1 were adopted, and, *on that assumption*, the relative advantages and disadvantages were found to be as follows :—

For the $15\frac{1}{2}$ to 1, or Low Ratio.—Such a form of bimetallism would, in all probability, produce an increased activity of all trade in gold-using countries; but, in reply, it is urged that this might be merely discounting future prosperity to a more or less considerable extent; for the depression, which would be almost sure to follow the inflation, must be taken as a set-off against this advantage. Though theoretical considerations point to the conclusion that low-ratio bimetallism would produce an opposite effect in silver-using countries, it is nevertheless urged that such a view is proved by the experience of the past to be unsound; for, as there has been no marked rise in silver prices since 1873, we have no reason, it is said, to expect that there would be a fall in prices at the re-establishment of bimetallism; and silver-using countries have, therefore, no reason to oppose the change. To this argument it is, however, replied that prices in silver-using countries might have fallen had silver not been demonetized; and that the fact—if fact it be—that silver prices did not rise after the

Summary
of the
arguments
for the low
ratio, and
the replies
thereto.

demonetization of silver does not prove that they would not fall if the demand for that metal for coinage purposes were now to increase; though it is true that there are reasons for believing that a fall in prices would be less prejudicial in its results in silver-using countries than in gold-using countries. It is also vehemently urged that low-ratio bimetallism, by stimulating our trade at home, would benefit us in our competition with silver-using countries; but, if this would be the case, it cannot be denied that the benefits thus gained by us would be exactly measured by the injury done to the silver-using countries.

Summary
of the
arguments
for the
market
ratio, and
the replies
thereto.

For the Market Ratio.—Market-ratio bimetallism can be advocated without resorting to any arguments which are favourable either to the repudiation of debts, or to tampering with the coinage, or to the issue of inconvertible paper money, or to a further alteration of the bimetallic ratio; whereas our position in opposing any such disastrous proposals would be weakened if any sanction were given to those arguments in favour of the low ratio which are likely to attract the popular vote. The condition of our working classes appears to be steadily improving, judging by pauperism returns; if a market ratio were adopted, no sudden change would take place to interfere with this progress; whereas, under the low-ratio system, since wages rise less quickly than prices, since strikes might be brought about by the attempt to get wages raised, and since much suffering might occur

during the reactionary period of depression, the possibility that this temporary stimulus to trade would in reality be an injury to the poor in gold-using countries must be considered. Assuming, as we have done all through this discussion, that the bimetallic ratio can be maintained, the introduction of a market-ratio system would leave contracts practically unchanged; whereas a low-ratio system would most materially alter the effect of existing commercial bargains, thus tending to shake credit, temporarily or permanently. The stimulus to trade in gold-using countries due to a rise of prices would die out in time, and low-ratio bimetallism would, therefore, merely produce a temporary beneficial effect in this way. But considerations of a permanent character, which ought to have most weight, seem to tell in favour of a market ratio; for the low-ratio system is more likely to break down; and if it does collapse, it will lead, if bimetallic arguments are sound, to another long period of depression in gold-using countries, which need not necessarily be the case after a breakdown of the market-ratio system.

Thus, on the assumption that prices would rise on the adoption of the low ratio, the above considerations seem to point, on the whole, strongly against that system. Taking into consideration the panics which might result from so great a change in the value of money, and from the consequent loss of commercial confidence, some authorities have expressed great doubts whether a ratio of $15\frac{1}{2}$ to 1 would cause a rise in prices; and it is evident that

The balance of argument is in favour of the market ratio, though some reasons for a compromise may be admitted.

if it did not do so, the whole of the arguments founded on the anticipated inflation of trade would be annihilated. I cannot myself doubt that prices would rise eventually; but, considering the great harm that might be done before confidence was in a measure restored, it seems to me that the balance of argument is overwhelmingly in favour of the market ratio, as compared with the ratio of $15\frac{1}{2}$ to 1. It is, however, necessary to draw a distinction between the advocacy of the low ratio on the ground that prices will be inflated at its introduction—a rise in prices which will create no permanent beneficial influence—and the advocacy of this ratio on the ground that it is less likely than the market ratio to produce a permanent tendency to falling prices. The arguments in favour of the view that the low ratio is more likely than the market ratio to ward off the dangers of falling prices in the future do not seem to be based on strong foundations; but, if they can be sustained, this merit must be fairly weighed in the balance in selecting the ratio. We have been considering the $15\frac{1}{2}$ to 1 and the market ratios as the extremes between which the chosen ratio must lie. An intermediate ratio might be adopted as a compromise between the demands of those who advocate these two types of bimetallism; and the difficulties which the Government of India would experience in accepting bimetallism with a ratio higher than, say, 25 to 1, on account of their monopoly-rupee system, affords a strong argument in favour of such a proposal. But, on the whole,

the case against the low ratio is, in my opinion, so strong that we ought to make but little compromise with those who desire to make the reform of the currency an engine for raising prices, unless the compromise is demanded on other grounds than the desire for inflation.

Those who accept these conclusions will do so with deep regret if they have been considering the bimetallic question with the sincere hope of finding a cure for the present depressed condition of agriculture. It must, however, be recognized that the benefits of bimetallism have often been grossly exaggerated. The true cause of the bulk of these agricultural troubles is not to be traced to any system of currency, but to the fact that virgin soils under sunny skies have been brought, as it were, to our very doors by means of excessively cheap sea transit. It may be that more land has been brought into cultivation than would be needed to supply the ordinary wants of mankind if the whole of it were worked so as to bring to the farmer the best return for the capital invested; if this is the case, the only remedy for the trouble is that the surplus land should go out of cultivation. Moreover, the *actual* fall in prices is not the only point to be considered. If the price of the produce of an industry either falls more or rises less than the average price of commodities, then an increased burden must be thrown on those carrying on that industry; for their produce will, in either case, exchange for so much the less of the produce of other industries.

Agricultural distress is due partly to "over production" and partly to the fall in agricultural prices relatively to other prices; troubles not to be remedied by bimetallism.

The fact that agricultural prices have fallen more than average prices does not in the least indicate that they would rise more than the average on the introduction of bimetallism; no such currency reform would affect the relative prices of different commodities; and, as far as the depression in agriculture is due to a change in the *relative* value of agricultural produce as compared with other commodities, no alleviation can be expected from the joint standard.

A rise in prices would stimulate trade in all gold-using countries alike; and the gain to agriculturists would be chiefly due to the lessening of the burden of their debts.

As to the rise in prices to be anticipated as the result of low-ratio bimetallism, it is easy to overstate the probable benefits. Even if the introduction of the joint standard with a low ratio would be an advantage to agriculturists in England, it must be remembered that it would also be a benefit to farmers in all other gold-using countries, and Englishmen would thus get no assistance in their competition with the United States or Canada. In order to consider the effect on the home trade, and to put the case clearly, let it be assumed that general prices would rise 20 per cent. after the introduction of low-ratio bimetallism. The total income of the farmer would thus be raised 20 per cent. But how about the outgoings? We are told that labour is to get its fair share of the spoils; wages, therefore, *ought* to rise 20 per cent. at once. Will not the landlord want, or rather will not he be able to obtain some advantage for himself from the reform he is asked to advocate? Of course he will, and, taking the case of land on short leases, the rent

may rise 20 per cent. also. Then the price of everything the farmer buys for his trade will rise 20 per cent.—that is part of our assumption. In fact, all his income will rise 20 per cent., and, taking the case of a farmer who is not in debt, so will all, or nearly all, his outgoings. But it may be said that anyhow his margin of profit will have risen 20 per cent.; that is true, but everything that the farmer wants to buy, as a private individual, will also have risen 20 per cent. Where, then, is his advantage? It is all, or nearly all, gone. Farmers who are in debt—that is, a large proportion of the whole body of agriculturists—will no doubt gain, and so will all manufacturers in similar circumstances; because the interest they have to pay on their loans would remain as a fixed payment out of their increased incomes, thus increasing their margin of profit. But the farmer with a short lease, who is not in debt, will only gain either on account of his competition with silver-using countries; or in so far as the different manufacturers he deals with, by not raising their prices to the full 20 per cent., allow him, as it were, to share with them in the increase in the profit they make because of the increase of their business, and because of the reduction of the burden of their fixed payments; or because taxes do not rise as much as prices;¹ or because the landlord does not raise his rent to the full amount.

¹ These are, moreover, the only reasons which can, in my opinion, be given in favour of the belief that land, now derelict, could be cultivated at a profit after a general rise in prices.

It may be urged, in reply, that farmers would gain, not directly, but by the indirect effect of the general stimulus to all kinds of trade. Manufacturers instinctively feel that they will derive a benefit from a general rise in prices; but a rise in prices and an increase in production are so intimately connected in their minds that they hardly separate the two movements. In the case of agriculturists, who cannot, as a rule, increase their production, it is difficult to see how a general rise of prices, due to inflated commerce, can benefit them in any way, except in the manner above indicated. The farmer on a long lease will, no doubt, gain in the same way as the farmer in debt, because his rent is temporarily a fixed charge; but, in that case, the unencumbered landlord will gain nothing, and will suffer on account of the general rise in prices. Though it is true that the total agricultural debt of the gold-using world amounts to an enormous sum, yet this is not quite the glorious prospect which is so often held out to agriculturists by bimetallic orators.

Real wages
will tend
to fall in
gold-using
countries,
and to rise
in silver-
using
countries.

It may be said that the fallacy in the above argument lies in the assumed movement in wages, and that this false assumption hides one of the chief ways in which our trade may be benefited by the proposed reform. Possibly this is so. Wages in gold-using countries would very likely not rise as quickly as prices; but, if they did not do so, low-ratio bimetallism would reduce the purchasing power of the labourer's earnings; and this would be exactly equivalent to a reduction in his wages.

As to silver-using countries, it has been seen that bimetallism will cause a fall in silver prices; and if wages were stationary whilst silver prices fell, it would, in the same way, be equivalent in effect to an increase in wages. If this is the change which is really anticipated, then the prospective benefits of low-ratio bimetallism amount, if placed in a naked form, to an expectation that by reducing wages in gold-using countries and by raising them in silver-using countries in a manner unperceived by the working classes, not only will the profits of our home trade be increased, but our manufacturers will gain a distinct advantage over their silver-using competitors. If this is one of the benefits of bimetallism, the point should, at all events, be made clear to those most concerned—to the working classes.

In concluding this part of the subject, I cannot help regretting the way in which bimetallists refrain from showing their hands clearly on this vital matter of the ratio. If they intend obstinately to adhere to a low ratio, then we may be certain that their real object is to force up prices. If that is the case, I, for one, am prepared to meet them as an open foe. But if they admit, with the bimetallic members of the Gold and Silver Commission,¹ that the particular ratio to be adopted is a matter of detail, if they agree with the view sometimes expressed by their leaders, that this question of the ratio “is comparatively of very small

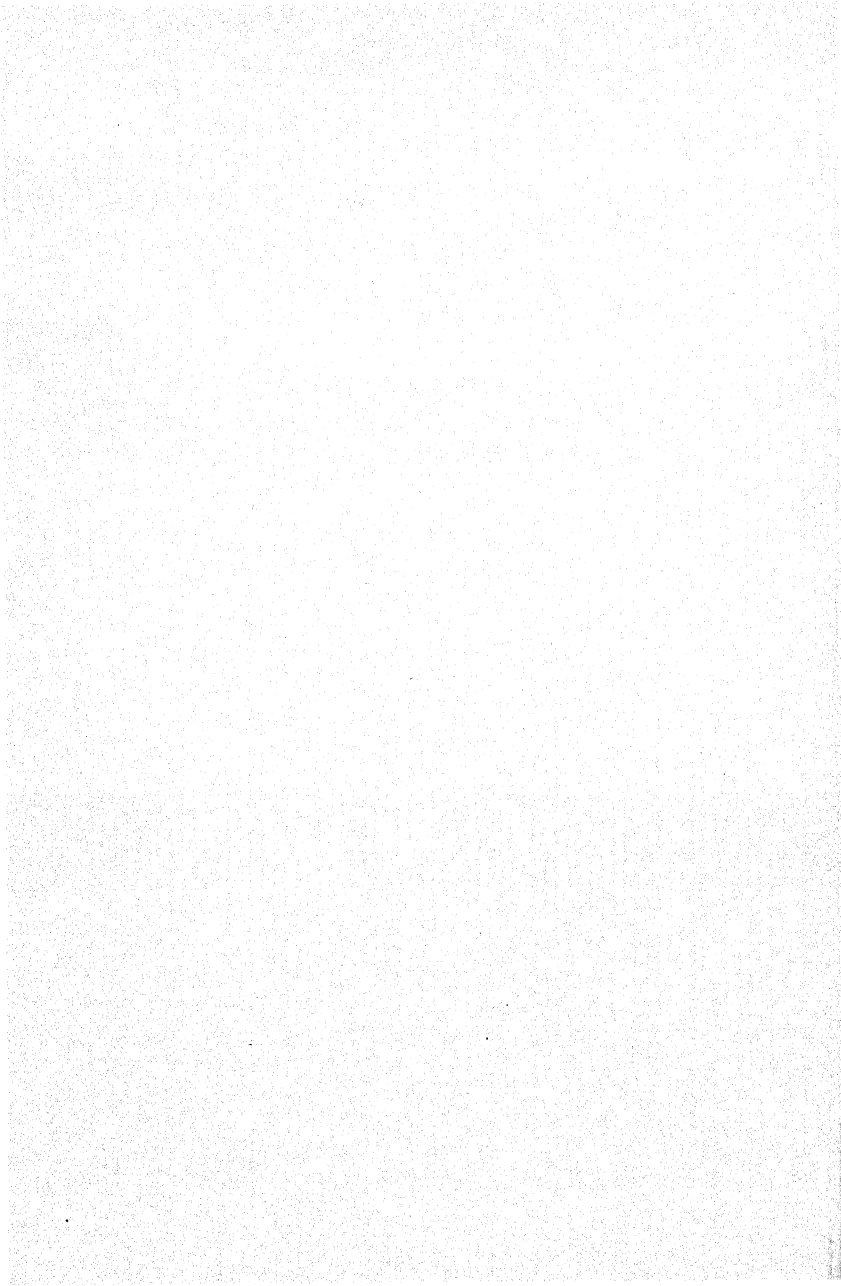
The question of the ratio is a vital one, and bimetallists should not conceal their views thereon.

¹ Final Report, p. 104.

importance,"¹ they must allow that the raising of prices is not one of their main objects. We may still, then, hope that they will reconsider their position, and be brought to see that this attempt either to inflate trade by altering the effect of contracts, or to benefit our own country at the expense of India, would bring them in perilously close company with those who would advocate measures which may fairly be described as "breaches of national good faith, which nothing could compensate." It is, however, to be feared that the strength of the bimetallic movement lies in the desire to ease the burden of debts, and thus stimulate commerce; but, with the hope that this is not the case, it may be worth while to proceed to consider whether bimetallism at a market ratio is or is not preferable to gold and silver monometallism.

¹ "A Bimetallic Primer," p. 53, H. C. Gibbs.

BIMETALLISM *VERSUS* MONO-
METALLISM.



CHAPTER X.

PRICES WILL BE STEADIER UNDER A BIMETALLIC SYSTEM.

THUS far it has been assumed that bimetallism is both a good and a practicable system, and the question of the ratio has been debated on this assumption ; the arguments discussed have all been for or against one form of bimetallism, and not for or against the system as a whole. The question whether market-ratio bimetallism is or is not preferable to monometallism remains to be considered ; and those who agree with my conclusions on the first point, may dismiss all the arguments against bimetallism which are founded on its tendency to artificially inflate trade, because, with the market ratio, it will not have that effect. This disposes at once of a large proportion of the objections usually urged against this proposed currency reform, because they are only applicable if a low ratio is adopted.

By rejecting the low ratio, we may at once dispose of many arguments against bimetallism.

It will be best to commence by considering the merits of market-ratio bimetallism, and then to pass to consider its demerits. As to its advantages, it is

urged that it will diminish such variations in prices as are due to causes primarily affecting the precious metals; that it will remove great difficulties from the path of the Government of India; and that it will greatly facilitate commerce between gold and silver-using countries.

The
oscillations
in prices
would be
less severe
under a
bimetallic
system;

With regard to the first of these alleged merits—the steady effect of bimetallism—the arguments on which this claim is based are of a somewhat speculative nature, though the claim is not generally denied. Bimetallists hope to permanently fix the relative value of the precious metals; and if gold and silver can be thus tied together, it appears evident that any force, at present tending to cause fluctuations in the value of only one of them, will have a diminished effect when applied to the two combined. The belief that this would be the case rests, in the words of Mr. Foxwell, “upon the general presumption that where you have two sources of supply each equally likely to fluctuate in quantity, the joint supply would be more stable than either of the separate sources. This is the principle upon which you would go in choosing to select for a water supply two sources rather than to leave yourself dependent upon one, provided that there was no reasonable presumption beforehand that both sources of supply would follow exactly the same variations.”¹ If we look to the value of the metals as articles of merchandise, the way in

¹ Professor H. S. Foxwell’s evidence before the Royal Commission on Agriculture of 1894, Q. 23838.

which the oscillations in prices would be checked may be illustrated as follows:—A rise in prices under bimetallism necessitates a fall in the value of both the gold and the silver in currency. And if silver coins fall in value, silver would flow out of the currency into the market, thus causing a fall in its value as an article of merchandise. Thus any increase in the volume of the currency due to the influx of gold would be partly compensated by a decrease in the amount of silver in circulation; whereas, under existing monometallic conditions, no such compensating effect is obtained. A given disturbing influence would, therefore, produce less disturbance in prices under bimetallism than under monometallism. In fact, the variations from the mean would be less, and, as it is to the extreme limits reached by prices in their oscillations that we should chiefly look in estimating the resulting evils, this would be a great gain. As a single example of this last truth, it will be readily conceded that a manufactory might be closed altogether, and hundreds of hands thrown out of work, by a severe fall in prices; whilst with a somewhat less severe fall, the business might have struggled on; and that the relative suffering in the two cases might be out of all proportion to the relative fall in the prices. It can hardly be denied that separate fluctuations do take place in the value of the two metals; for even those monometallists, who deny that the fall in prices in England is largely due to causes primarily affecting gold, have to search about

for independent causes affecting the value of silver in order to account for the alterations in its gold price; both parties, in fact, consider that one or other of the metals has recently varied in value from causes not primarily affecting commodities. And if we admit that the values of gold and silver act, in some respects, as independent variables, and if it is agreed that it is practicable to link them together so that each may have an influence on the value of currency after their marriage, it hardly seems possible to deny that bimetallism would produce a certain steady effect.

though the record of prices since 1873 cannot be quoted in favour of this view.

It would no doubt be most important if we could get conclusive information as to the relative steadiness of prices before and after the abandonment of bimetallism on the Continent. No one denies that there has been a great fall in prices, and if this fall has been due to forces previously controlled by the bimetallic tie, it is probable that we have not yet reached the normal condition of things under the new currency arrangements. Of course if this fall in prices has been harmful, and if the forces producing this fall are still in operation, it is evidently most desirable that the restraining influence of the bimetallic laws should be again brought into operation; this point will, however, be considered in connection with the discussion on the increased use of gold in the future. Putting aside the general downward trend of prices, and considering only relative unsteadiness or the minor oscillations, we find that there is little reliable information

to guide us. The time has been too short for such comparisons; and, moreover, so many other factors have been at work that the separate results of these changes in the condition of the currency cannot be disentangled. It is, however, asserted that the tables of index numbers of general prices do not tend to support the view that prices have been more unsteady under existing monometallic conditions. On the other hand, the price of silver has not only been falling, but has also become more unstable than in the past; and as far as that is an indication of the movement of silver prices, it would seem to confirm the theoretical conclusions as to the steadying effect of bimetallism.

But although it is impossible to prove from actual figures that a bimetallic standard tends to be more stable than one based on a single metal, yet this truth is seldom denied by those who have studied the subject, even if they are keen in the monometallic faith. And, if this is admitted, it must be held to be a point in favour of bimetallism; for the rise and fall in prices, due to variations in the value of the currency, must help to create periods of depression and inflation, and to produce other evils arising from alterations in the burden of indebtedness, which are in almost every way harmful to the trade and to the well-being of the community; and these evils would thus be minimized by means of bimetallism. It has, however, recently been demonstrated by Professor Edgeworth that, according to the Calculus of Probabilities, the steadying effect

If bimetallism does steady prices, it undoubtedly affords an argument in favour of the system.

of bimetallism may be expected to be relatively small. Even if the variations in average prices were solely due to changes in the conditions primarily affecting the precious metals, according to these calculations these variations would not be very greatly reduced by the introduction of the joint standard.¹ But variations due to other important considerations, such as the state of credit, are superimposed on these monetary variations in prices; and for this reason the comparative increase of stability in prices due to bimetallism would, it is said, be very small indeed. Whether Professor Edgeworth's conclusions will be accepted in their entirety by other economists remains to be seen. But his examination of the subject should at all events make us pause before attaching any very great weight to this plea in favour of bimetallism.

¹ In ordinary language, only in about the proportion of 10 to 7 (*Journal of the Royal Statistical Society*, September, 1897).

NOTE.—It can, I think, be proved that the adoption of the joint standard would increase the stability of prices for other reasons besides the one given in the text, which has regard only to the question of supply; especially if the ultimate rather than the immediate results of such a reform are under consideration. Let us suppose the supply of both metals absolutely invariable. We may look on this supply, in the case of each of the two metals, as falling into two reservoirs, one representing the metal in the arts, and the other the metal in the currencies. In each case free coinage connects the two reservoirs together, so that they must remain at the same level; the level representing the value of the metal. An *effective* bimetallic system would connect

the whole mass of silver with the whole mass of gold in a similar way, and prevent any variations in relative value; and this it would do as effectively "when only one nation is bimetallic as when the whole world adopts the system" (Dr. Irving Fisher, *Economic Journal*, September, 1894, p. 536). If the size of these reservoirs varies, the level of the liquid in them must vary also; and, in this way, the effect of variations in demand may be represented. If the size of the reservoir changes through a portion only of its retaining wall moving, then the larger the surface of the reservoir, the less will be the change in level thus produced. In this way the effect of such demands for currency as that created by a single nation resuming specie payment will be represented. And it follows that *the greater the number of nations adopting any particular standard, the greater will be the stability of prices as measured by that standard*. But there is also another principle to be held in view. The average demand for the metals for the arts throughout the world changes very slowly, and the level of the liquid in the metal-in-the-arts reservoir would rise or fall with great uniformity, if no other changes were taking place; whereas the level in the metal-in-the-currencies reservoir may be subject to great variations through changes in monetary legislation, etc. When the two reservoirs are connected, the larger the surface of the more stable reservoir in comparison with the more unstable reservoir, the less will be the variations of level in the joint system. Hence it follows that *the greater the proportion of the standard commodity employed in the arts, the steadier will be prices as measured by that standard*. If the gold standard were to be universally adopted, instead of occupying a limited area as at present, prices would be more unstable because of the smaller proportion of metal employed in the arts, and more stable because of the greater number of nations adopting the same system; the latter influence, I believe, preponderating in the end. In considering the stability of the joint standard, it must be remembered that, according to the quantitative theory of prices, the total value of the currencies of the world is not affected by variations in the values of the metals composing them; and that, at any given moment, the size of the metal-in-the-currencies reservoir may

be regarded as not varying with the system of currency in force. Thus, in comparing bimetallism with universal monometallism, the size of the reservoir of metal in the currencies will be the same in the two cases; whereas the reservoir of metals in the arts will evidently be approximately twice as big with effective bimetallism as it would be with universal gold monometallism. Hence it follows that the joint standard, even if only partially adopted, but effectively maintained, would immediately increase the stability of prices as compared with a universal gold standard, both because of the greater proportion of metal in the arts, and because of the greater volume of metal effected by any variations in demand. This view of the matter does not appear to me to have been sufficiently considered by Professor Edgeworth or other economists.

CHAPTER XI.

ADVANTAGES OF A STEADY RATE OF EXCHANGE
WITH SILVER-USING COUNTRIES.

BESIDES claiming the greater inherent stability of the joint standard, bimetallists have also urged that the general level of prices in gold-using countries has been lowered, not only by causes primarily affecting the value of gold, but also by the indirect influence of commerce with silver-using countries; and that bimetallism will be a cure for this evil. This raises the most difficult point in the whole of this difficult controversy, and one which it will be convenient to postpone until after the discussion of the effect of rising and falling prices on trade. It will, then, be seen that an alteration in the value of silver, though it will produce no ultimate effect on the level of gold prices, will temporarily disturb trade in an injurious way; and that this is a trouble which would, of course, be cured by the adoption of a common standard. The bimetallic contention on this point appears therefore to be partly, though not wholly, justified.

The discussion of the indirect effects of trade with silver-using countries postponed to Chapters XXI. and XXII.

The difficulties experienced by silver-using countries, and especially by India, on account of the increase in the burden of fixed debts are not denied.

When we pass on to consider the troubles which have arisen in India (especially before the closing of the mints) and in other silver-using countries, as a direct result of fluctuations in the rate of exchange, we are luckily on less debatable ground. Here the evils are not denied, and all that is urged in reply is that they have been greatly exaggerated, and that resulting disadvantages have to be fairly weighed in considering any proposed change. The appreciation of gold in comparison with silver, which has recently taken place, means that the number of rupees which have to be given in exchange for a given amount of gold has been increasing. India has contracted large debts, the interest on which is payable in gold; and, as the revenue is collected in silver, this change in the relative value of the metals has necessitated an increased sum being raised by taxation in order to pay the increased amount of silver representing the fixed gold interest on these debts. An increase of taxation is objectionable in any country, but it is especially objectionable in India, where the poverty and the conservative habits of the people make it almost impossible to impose new taxes. Moreover, the movements in the rate of exchange, whilst the mints were still open, made it extremely difficult for the Government of India to foretell, with any approach to accuracy, the number of rupees which would be required in any one year for the payment of this interest, for the purchase of any stores in England, or for other payments which had to be made in gold; and the

inconveniences due to inaccurate budget estimates were, therefore, constantly felt. In the opinion of the monometallic members of the Gold and Silver Commission "there can be no doubt that the uncertainty created by the want of a fixed ratio, the apprehension of a further fall, and the impossibility of determining to what point that fall may reach, do make the task of the Government of India a very difficult one, and constitute a real and very serious evil;"¹ whilst the bimetallic members (amongst whom were to be found the only Commissioners who had any personal experience of India) declared that "the uncertainty attaching to the future must be a matter of great embarrassment to the Government";² whilst Sir L. Mallet alluded to the "injurious, not to say disastrous effect of the absence of a common standard between this country and its greatest dependency."³ It is certain that if bimetallism could be maintained as a permanency, this difficulty would be completely removed for the future; here, therefore, we have an undoubted merit of the proposed system as compared with silver monometallism. It is true that the Government of India, in order to diminish the burden of existing debts, would have preferred, whilst the mints were still open, to have adopted a ratio considerably lower than the ratio governing the market; but this preference is no argument against market-ratio bimetallism as compared with monometallism; for they appeared to regard "the re-establishment of a

¹ Final Report, p. 63. ² Ibid., p. 98. ³ Ibid., p. 121.

fixity of ratio between gold and silver as of even greater moment than the restoration of silver to its former value as compared with gold.”¹

In consequence of these troubles India has adopted the monopoly-rupee system.

The difficulties above described were so keenly felt by the Government of India that, in 1893, it was decided to close the mints to the free coinage of silver, and to allow the public to purchase rupees with gold at the rate of fifteen rupees to the sovereign, or one shilling and four pence the rupee. It is thus intended, by creating an artificial scarcity of rupees, to force up their value, and therefore, *probably*, their gold price. The gold price of the rupee will, however, be prevented from rising about the point at which rupees can be purchased for gold; because, at that point, new metal will commence to flow into the currency. And when the gold price of the rupee is raised to this limit, a stable rate of exchange between rupees and gold may, therefore, be established. The price of the rupee has not yet risen to the gold limit, and this system—the system of monopoly rupees—has not yet been long enough in existence to enable us fairly to judge of its results. It is probable that this reform will be successful in creating a steady rate of exchange between monopoly rupees and gold, and in lessening the anxiety of the Government of India as to the future;² but, whether

¹ Final Report, p. 63.

² It is certain that the closing of the mints will tend to slowly raise the value of the rupee. But there are no grounds for being certain that the rupee will rise in value more quickly than any particular article of merchandise, such as gold is in India.

it does so or not, it is evident that the rupee will no longer be valued by the silver it contains; and also that the same disquieting influences which, it is alleged, hampered the trade between India and gold-using countries before the closing of the mints, will, in future, be introduced into the trade between India and ordinary silver-using countries.¹ If all the great commercial nations were to adopt gold monometallism, the difficulties arising from fluctuations in the rate of exchange, in so far as they are due to currency causes, would, no doubt, vanish. But, even with regard to India, such a proposal is not certainly practicable; for, according to Sir Robert Giffen, "the weight of Indian expert opinion," as far as he could judge, "as to the desirability and even the practicability of a gold standard for India is entirely against" the views of those who advocate that proposal.² The difficulty of accomplishing such a reform presumably lies both in the expense of creating the necessary gold reserve, and in the danger of discontent (also inherent to the present system) because of the fact that the hoards of silver accumulated by the natives would no longer be convertible weight for weight into rupees. On the merits of this controversy as to the future policy

The increasing use of gold by other nations may raise its value with such rapidity as to render this method of introducing the gold standard into India an impossibility.

¹ Report of the Committee to inquire into the Indian Currency, 1893, p. 30.

² *Times*, September 25, 1897.

for India I do not pretend to judge; but I have no doubt that the monopoly-rupee system is thoroughly unsound, and should only be tolerated as a temporary arrangement.

Fluctuations in exchange constitute an undoubted burden on trade.

The case of India is an exceptional one, but it cannot be denied that fluctuations in the rate of exchange do cause an impediment to all commerce between gold and silver-using countries. The ratio, and consequently the rate of exchange, has been very unstable since 1873, and every transaction has been subject to the risk of an alteration in the value of the metal in which the payment had to be taken or made.¹ Under such conditions, commercial transactions become more or less speculative, and, though it is possible to insure against many of the risks which are thus experienced, the price paid for the insurance constitutes a true burden on trade. Moreover, this same uncertainty as to future rates of exchange discourages capitalists from investing their capital in countries where gold is not the standard. English financiers, as already remarked, demand a higher rate of interest for a silver than for a gold loan, as a compensation for the risk of a further fall in the gold price of silver. The higher rate of interest necessary to attract capital into silver-using countries, no doubt, acts as a harmful check on their development.

In reply to the arguments in favour of bimetallism contained in this and the preceding chapter, it is sometimes urged that fluctuations in the value of

¹ Final Report of Gold and Silver Commission, p. 26.

inconvertible paper currencies produce evils of the same kind as those here described, but of even greater magnitude; and that these—the greater evils—will be untouched by bimetallism. This may or may not be true; but the existence of one evil is no argument against attempting to cure another.

If we turn from these theoretical considerations to the dry facts of commerce, it is true that it is difficult to show the evil effect of the harmful influences under discussion. It is true also that experts, who alone probably can accurately estimate the weight of these considerations, differ widely as to the gravity of the dangers disclosed. But no one denies that the alterations in the ratio constitute an impediment to commerce, and all will admit, in the words of the unanimous Report of the Gold and Silver Commissioners, that “everything which hampers complete freedom of commercial intercourse between two countries, or which imposes on it any additional burden, is, undoubtedly, an evil to be avoided or removed if possible. If, therefore, a remedy could be devised to accomplish this end, without involving the risk of other disadvantages, there cannot be two opinions that it would be worth while to apply such a remedy.”¹ Either bimetal-
These inconveniences could be remedied by bimetal-
lism.

¹ Final Report, pp. 62, 94.

CHAPTER XII.

DISADVANTAGES OF BIMETALLISM—DANGERS RESULTING FROM A BREAKDOWN OF THE SYSTEM.

The commonest argument against bimetallicism is that the ratio cannot be maintained. In Chapters I. and II. this view was controverted, especially as to market-ratio bimetallicism.

WHAT, then, are the objections to market-ratio bimetallicism? The argument most commonly used in conversation against this reform is that a fixed ratio cannot be maintained; that it is, and always will be, impossible to alter the value of any material by law, because value depends on inherent qualities outside the scope of legislative power. This point has already been discussed at considerable length in Chapters I. and II., and it is not necessary to go over the same ground again. It may, however, be as well to recapitulate the arguments proving that the more nearly the legal ratio adopted coincides with the ratio in the market at the time of its adoption, the greater is the probability of its being possible to establish and maintain a bimetallic system. It was seen in that discussion that the stability of a bimetallic system depends on the fact that all, or nearly all, either of the gold or of the silver must disappear from circulation as full-weight legal tender before the ratio in the market will differ

from the legal ratio; and it was shown that the more nearly the ratio adopted coincides with the "natural" ratio, the less likely is this to occur; and that the market ratio is the best, though an unreliable, indication as to what the "natural" ratio may be. Market-ratio bimetallism would have little or no effect on prices, and the precious metals would in all probability, after its adoption, be no more or no less valuable than at present; there would, therefore, be no reason to believe that either more or less of them would be used in the arts than at present, and there would be no tendency for either metal to be withdrawn from circulation to any greater extent than at present to supply such demands. The flow of the metals from one country to another is determined by the difference of the ratio between their values in the two places; and as the establishment of market-ratio bimetallism would produce no alteration in the ratio anywhere, this reform would, therefore, produce no tendency for gold to escape into those countries which did not join the Bimetallic Union, because no profit could be made by the traffic in bullion. According to some authorities, gold would be withdrawn from circulation and from the reserves held against notes in order to be hoarded, with the expectation that the bimetallic system would break down and that gold would then go to a premium; in fact, it is suggested that there would be a vast speculation for a rise in gold. Reasons were given for believing that this might be the case if a low ratio were adopted; but that there would be little fear

of such an occurrence with market-ratio bimetallism, because no one could foretell which metal would tend to go to a premium on the breakdown of the system. With any ratio, moreover, this tendency to speculate would grow less, the more the permanence of the system became assured. These are the main arguments in favour of the belief that a permanent parity of exchange can be established if the ratio adopted does not differ too widely from that ruling the market.

Variations in the relative value of gold and silver bullion are possible if there are mint charges; little inconvenience would, however, be caused in this way.

In this discussion, little was said about mint charges or seigniorage. It was shown how the ratio in the market would always be the same as the ratio fixed by law, because any difference between the two which might arise locally would be corrected either, on the one hand, by metal being taken to the mint, or, on the other, by coin being melted down to supply the demand in the market. But this argument assumed that the various governments would not only coin metal in unlimited quantities, but also that they would make no charge for so doing. If a charge were demanded for minting, either to cover the actual cost of the process or to be a source of revenue to the State, then it is possible that the ratio in the market might differ from the legal ratio to an extent proportional to that charge; for, assuming a difference between the legal and the market ratios to exist, if coins of the undervalued metal were melted down, and exchanged in the market for the other metal in bullion, and if this bullion were then taken to the mint to be coined, a net profit on the

transaction would only be made if the legal ratio differed so widely from the ratio in the market that the gross profit on the transaction was more than sufficient to pay the mint charges. Thus, with a seigniorage system, the ratio in the market might not accurately coincide with the fixed legal ratio, and might, therefore, vary within certain fixed limits. But if it did not pay to melt down undervalued metal in this way, it would remain in circulation, and it would continue to circulate at the legal ratio. As it is the ratio between the value of the coins that we desire to fix, and as this would not therefore be affected by mint charges or seigniorage, there is no reason to think that these slight variations in the ratio in the market would cause any inconvenience as far as internal trade is concerned. It is, however, conceivable that slight variations in the rate of foreign exchanges might be caused in this way.

Monometallists often urge that history proves the falsity of the theories of bimetallists; but the study of Shaw's "History of Currency," and of other works written in support of that view, leads me to exactly the opposite conclusion. All that is proved, in my opinion, is that without international agreements there was in past times a perpetual ebb and flow of the precious metals between countries with different legal ratios, and that this led to constant changes in those legal ratios in order to endeavour to stop this movement. The experiment of legalizing the same ratio in all countries was never

The ebb and flow of metals in past times between countries with different metallic ratios is no argument against international bimetallism.

tried. It is true that there were, on this account, frequent alterations in the legal ratio, but it is equally true, I believe, that in the history of two and a half, if not of six centuries, there is no example on record of any change in ratio so great or so sudden as that which has occurred during the last twenty years—that is, since the repeal of the last bimetallic laws. This can only be accounted for by the fact that the old imperfect bimetallic laws, though they differed in different countries, and though they did encourage an interchanging movement of the precious metals, nevertheless did tend to maintain the mean ratio adopted as the ratio between the metals in the open market. If that be so, the period before 1873 is no guide as to the extent and amount of the changes in the relative value of gold and silver which we may expect in the future in the absence of bimetallic legislation.

The chief danger to bimetal-
lism is the breaking
of inter-
national
agree-
ments.
The risk
is small
with a
market-
ratio
system.

As long, therefore, as there is no way in which the £800,000,000 of gold in currency can be otherwise absorbed, we may predict with confidence that a bimetallic system at a market ratio would not break down, granted the continuance of the international agreements. Of course the most probable danger is that these treaties would be broken or neglected by some of the contracting parties, thus creating a reservoir large enough to receive all the gold circulating in the remaining bimetallic countries. But the gold in the faithful bimetallic countries would only tend to flow out of those countries if a change in the ratio took place in the

deserting countries—if, that is, a difference were established between the ratio in the two areas; and the more nearly the legal ratio adopted coincided with the ratio in the market—or the smaller the change of ratio brought about by the establishment of the system—the less likely would it be that there should be any change at its abandonment. Thus, with market-ratio bimetallism, desertions from the Bimetallic Union need not necessarily cause the system to fail generally; and it is, moreover, difficult to see what should tempt any nation to disregard their obligations if that ratio were adopted.

Not only must the probability of a failure of bimetallism be discussed, but the probable damage caused by such an event, should it occur, must form a material element in our calculations. Certain arguments in support of the view that a breakdown of a low-ratio system would be followed by years of trade depression, the force of which bimetallists can hardly deny, have already been discussed; but no suggestion has yet been made as to any dangers which would result from the abandonment of market-ratio bimetallism. If we look to the teaching of history, we shall see that when the Latin Union forsook bimetallism in favour of their present standard, no sudden panic or collapse occurred, and the alteration in ratio, which subsequently took place, was a gradual process. If market-ratio bimetallism were now introduced, there is no reason to believe, judging from this example, that any

The evils consequent on the breakdown of market-ratio bimetallism may be no greater than those produced by the same forces under mono-metallism.

immediate consequences of a serious nature would accompany its breakdown; nor, it will be seen, can we predict that the evils due to any subsequent slow alteration in the ratio after such a breakdown would be any more harmful than the troubles which the fates have in store for us from similar causes if we maintain the existing currency systems. Monometallists frequently urge that there has been no trade depression during the last twenty years; or, if they admit its existence, they declare that it has had nothing to do with currency causes; if they adopt either of these attitudes they cannot point to the past as a proof that any evil results whatever will follow the rupture of a Bimetallic Union; in fact, they would hail the event as a blessing. But if it is admitted that evil results would follow the abandonment of bimetallism, it will not do only to look at one half of the picture, and only to consider those evils which would arise if some natural tendency of the metals to vary in value should burst the bonds of bimetallism, without endeavouring to estimate the probable effects of the same causes under the existing systems. It must be admitted that it is but a choice of evils. For example, if it be assumed that the disruptive forces could only be restrained by legislative means for, let us say, half a century, then the relative advantages and disadvantages would be as follows. If, on the one hand, the existing gold and silver monometallic systems were maintained, we should have fifty years of fluctuating exchanges,

with a general drift in one direction; and, if that direction were towards the further depreciation of silver, the difficulties of the Governments of the United States and of France would soon become serious. If, on the other hand, bimetallism were introduced, we should have half a century of steady exchanges and of steadier prices, followed by whatever evils might accompany the sudden return to monometallism under such conditions. No doubt when the restraining force was removed at the end of the bimetallic period there would be a more rapid change in the ratio than would take place if it had been free to act during the whole interval; but there is no reason to think that the total change would be greater in the one case than in the other. The choice may, in fact, be likened to that between a lingering ailment and a sharp short illness, and, of these, it is hardly possible to be quite certain which would be the greater evil.

These considerations, therefore, lead to the conclusion that there is a high degree of probability that market-ratio bimetallism could be maintained; that it is probable that it would be maintained; that the evils accompanying its abandonment may be easily exaggerated; and, should such an event take place, that the troubles due to alterations in the ratio might be little or no more than those which must accompany the present system. If these conclusions are correct, it is evident that, as bimetallism has been proved to possess undoubted

Market-ratio bimetallism; if once established is likely to be permanent but, if it does fail, the damage will not be great.

advantages, other arguments ought to be forthcoming before it is rejected. The additional objections against market-ratio bimetallism, which are few in number, will now be considered.

CHAPTER XIII.

OTHER OBJECTIONS TO BIMETALLISM.

IN the first place it is claimed for gold that it is intrinsically a better metal for coinage purposes than silver, both because it forms a more stable standard of value, and also because it is in every way more convenient; and, on these assumptions, it is urged that the adoption of the joint standard would be an injury to existing gold-using countries. As to the relative stability in value of the two metals, something will be said later on; but it cannot be denied that gold coins are more convenient than silver coins, except for the purposes of small change, being lighter in weight for a given value. As to the relative cost of conveyance of the two metals, the greater weight of silver is said to be almost compensated for by the fact that gold is more easily stolen, and requires more careful packing. Thus gold is the more convenient metal of the two for coins of considerable value, and if it could be shown that bimetallism would tend to drive it out of circulation in considerable quantities, the proof would afford, no doubt, a legitimate

Silver,
being
heavier for
a given
value than
gold, is less
convenient
except for
small
change;
but gold
would not
be driven
out of
circulation
by market-
ratio bi-
metallism

argument against this reform. As far as can be seen this would not be the case with market-ratio bimetallism. The amount of either metal in circulation depends on the total amount of metal in existence, and on the amount used for hoarding and in the arts; it is the difference between the two. If the introduction of bimetallism did not cause any variation in the relative values of the two metals (that is, if we adopted the market ratio), there is no reason why it should cause any variation in the relative output of gold and silver from the mines; and, if this reform did not alter their relative values, neither would it affect the relative demand for the two metals either for use in the arts, or for hoarding; and if neither the total production of the two metals, nor their total consumption for non-monetary purposes is affected by bimetallism, the difference between the two, or the amount used for currency, will be unaffected also. The amount of gold in circulation will not, therefore, be decreased, and no inconvenience will on the whole be caused in this way. It is possible, however, that the increased use of gold in the currencies of the East might necessitate more silver being used in the West in order to adjust the balance, as it were; and it may be true that we should suffer, in this way, for the increased convenience of silver-using countries. But, if the metal used for coinage is determined by the habits of the people, as is often asserted by monometallists, there is no reason to expect that such a change will occur to any material

extent. And it must be remembered that if more silver did flow into the Western currencies, the inconveniences thus caused might be completely, or almost completely, obviated by the increased use of paper money.

Objection has also been taken to market-ratio bimetallism on account of the cost and inconvenience of increasing the weight of silver token coins so as to bring them up to their full metallic value. This is, no doubt, *pro tanto* a legitimate argument. It is true that a vast amount of silver has been coined at a low ratio. But it is doubtful whether much or any expenditure in recoinage of this metal would prove to be necessary, because some or all of these existing token coins might remain in circulation after the proposed reform. The only objection to a moderate use of token coinage is the temptation it affords to false coining. This does not appear to be a very serious evil, and it should be weighed against the many merits of the token system, some of which we are apt to forget. Token coins are, of course, convenient as being lighter than those which contain their full weight of silver; this is true now, and it would be true under a market-ratio bimetallic system. We all recognize the convenience of having a sufficiency of small change freely circulating about the country, and this is greatly facilitated by the token system; in the first place, the profit made by governments in issuing coins at a greater value than the value of the metal they contain affords a strong inducement to get as much small change

With the existing market ratio, the weight of silver coins, other than tokens, would be greatly increased. But the token system should be retained, and greater use made of convertible notes.

into circulation as possible; and, in the second place, there is no temptation to melt down such coins for use in the arts at home or for export, because, when melted into bullion, they lose much of their value; no one exports shillings, because they are only worth about sixpence abroad. In bimetallic discussions we often hear of the danger of gold leaving the country, but never of the danger of a scarcity of silver; yet under a bimetallic system, with no token coinage, a diminution in the amount of available silver might, in some countries and under certain conditions, become a source of very considerable inconvenience. Thus there are excellent reasons, besides the mere cost of recoinage, why something of the nature of the existing token system should be retained; and, if it is retained, the plea against bimetallism, on the ground that it will increase the weight of silver coins, is completely answered as far as small change is concerned. It would, however, be necessary to coin a standard full-weight silver coin, because the mints would not, of course, be freely open to the coinage of token coins; but, by means of an increase in the use of convertible notes, much of this heavy silver might be allowed to remain in deposit in the vaults of the banks. To still further obviate these inconveniences, it has been suggested—and the suggestion is a good one—that the mints should issue notes against deposited bullion, without actually going to the expense of coining the metal at all. But, whatever plan was finally adopted, there can be no doubt

that the difficulties due to the increase in the weight of the new silver coinage might be more or less completely overcome by means of an increase in the use of notes, and by the retention of the system of token coinage.

In discussing the choice of a ratio, it was seen that forces would be brought into play which would raise, or tend to raise, the general level of prices if a low ratio were adopted. This would, of course, alter the effect of contracts, for both the interest and the capital due to creditors would become less valuable; and the result would, therefore, be inequitable. But, if the ratio in the market were adopted as the legal ratio, no change in prices would be caused by this reform, and this adverse plea falls to the ground. It has, no doubt, been frequently suggested that bimetallism of any kind would be an unfair interference with existing contracts, because it would give to the debtor an option, not contemplated in the contract, of paying in either metal, whichever might be cheapest. But this objection assumes the failure of the system; because, if it is successful, the two metals would remain permanently at the same relative value, and one of them could not be said, in this sense, to be cheaper than the other. Directly the one metal did become cheaper than the other, *all* debts would be paid in that metal, and the circulation of the dearer metal as legal tender would entirely cease; and this has been seen to be a very improbable contingency. The objection may, however, be raised in another form. If gold prices

The effect of market-ratio bimetallism on existing contracts would be small, and the injustice to the individual negligible.

continue to fall, it is true that, in gold-using countries, creditors and the receivers of fixed gold payments will find their receipts becoming more and more valuable under the existing system. Whereas, according to the views of bimetallists, international bimetallism would place a check on the increasing use of gold, and consequently on the increasing value of all payments measured by that standard. The creditor would, in fact, by this reform, be deprived of the advantages which he may now expect to derive from the effect on gold prices of any further abandonment of the use of silver, and, to a certain extent, of the advantages due to any rise in the value of gold caused by any increase in the use of that metal in the arts.¹ On this assumption, the debtor would, no doubt, gain and the creditor would lose to a certain extent by the introduction of market-ratio bimetallism. It may perhaps be worth noting that it is possible, though, I think, improbable, that the creditor in gold-using countries might be benefited by the adoption of bimetallism. The belief in the continuation of the recent fall, both in the general level of prices and in the price of silver, may be fallacious. If, under existing currency conditions, we are in reality about to enter on a period of rising prices, and if silver is about to rise in gold price, then the introduction of the joint standard at the

¹ In just the same way that the debtor in India, by the introduction of the monopoly-rupee system, has been deprived of the benefits of a fall in the value of silver.

present moment would act as a check on this rise in prices; and international market-ratio bi-metallism would prove to be a benefit to the creditor rather than to the debtor. But, in either case, the problematical injustice to the individual thus fore-shadowed is, I think, of the type and of the degree which should be neglected in considering broad national issues.

It is more material to observe that if it would be dishonest to interfere with existing contracts by giving the debtor, by introducing a bimetallic system, an option as to the method of payment which was not taken into consideration when the contract was agreed to, it would be equally dishonest, by abolishing a bimetallic system, to deprive the debtor, to the supposed advantage of the creditor, of the option virtually included in his contract as to the metal in which the payment was to be made; the establishment or the abandonment of bimetallism are in this respect equally open to attack. Monometallists are apt to accuse the advocates of bimetallism of dishonesty; but it is evident, as far as this consideration is concerned, that they ought equally to censure any nation, like the United States or France, which abandons bimetallism in favour of monometallism; and an impartial consideration of this fact will lead, I think, to the conclusion that both charges may, under certain conditions, be dismissed. It must be remembered that, at the termination of the Latin Union system, no sudden alteration in the ratio took place, and the holders

The introduction or the abandonment of bimetallism would only escape censure if the effect of contracts were not suddenly altered thereby.

of gold and silver bullion, coins, debts or securities did not immediately find their situation altered; the introduction of bimetallism would, in all probability, equally escape the charge of dishonesty if, in like manner, it caused no sudden change in liabilities or credits; and this could only be the case if the ratio in the market were selected as the bimetallic ratio.

It is a legitimate argument against bimetallism that an opportunity is afforded of adopting the cheaper metal as the standard if the system should break down.

If a bimetallic system, after being introduced, were to break down, each nationality might, it may be urged, then drift into or adopt a monometallic system with the cheaper metal as their standard, thus lessening the burden of national and commercial debts. If the parity of exchange is not maintained, it has already been seen that the cheaper metal will be used in all legal tender transactions, to the complete exclusion of the dearer metal. The risk of drifting, in those circumstances, into monometallism with a depreciated standard is, therefore, an objection to bimetallism, and one that must be considered in balancing its advantages and disadvantages. As to the deliberate adoption of monometallism with this object, any change in the currency no doubt makes it more easy to accomplish other changes—an argument that may be urged against all reform—and the intervening bimetallic period would, therefore, make this kind of veiled repudiation of existing liabilities slightly more probable. This inequitable method of easing the pressure of debts, contracted before the establishment of bimetallism, could only be adopted by

any existing monometallic country if, at the breakdown of bimetallism, monometallism with a different metal to that in use at the present time were adopted; because to return to the use of the metal which was legal tender at the time at which the contract was made can hardly be called inequitable. Are existing gold-using countries likely to adopt silver monometallism in such circumstances in order to lessen the burden of debts? To me this seems a very improbable contingency. As to silver-using countries, it is true that they might adopt the gold standard if they found, when the Bimetallic Union had dissolved, that silver had risen in gold price; and, as far as their action affected debts contracted in silver before the establishment of bimetallism, it would no doubt amount to a kind of repudiation. But if international bimetallism is ever established, it will, I believe, only be abandoned as the result of some unforeseen and very serious disturbance in the relative values of the precious metals; and the risk of the kind of repudiation here under consideration appears, therefore, to be small, and must, moreover, be weighed against the evils which the same causes would produce under monometallic conditions.

With regard to all contracts made after the establishment of bimetallism, the uncertainty as to the metal in which payments would be made if the system were to be abandoned would, it is suggested, raise the rate of interest on loans as an insurance against the risk of the depreciated metal being

selected. This is no doubt a legitimate argument; but if bimetallism were to last for some time, the belief in its continuance would reduce the insurance against this risk to a vanishing point.

The commercial greatness of England is not due to her currency system, but to other causes.

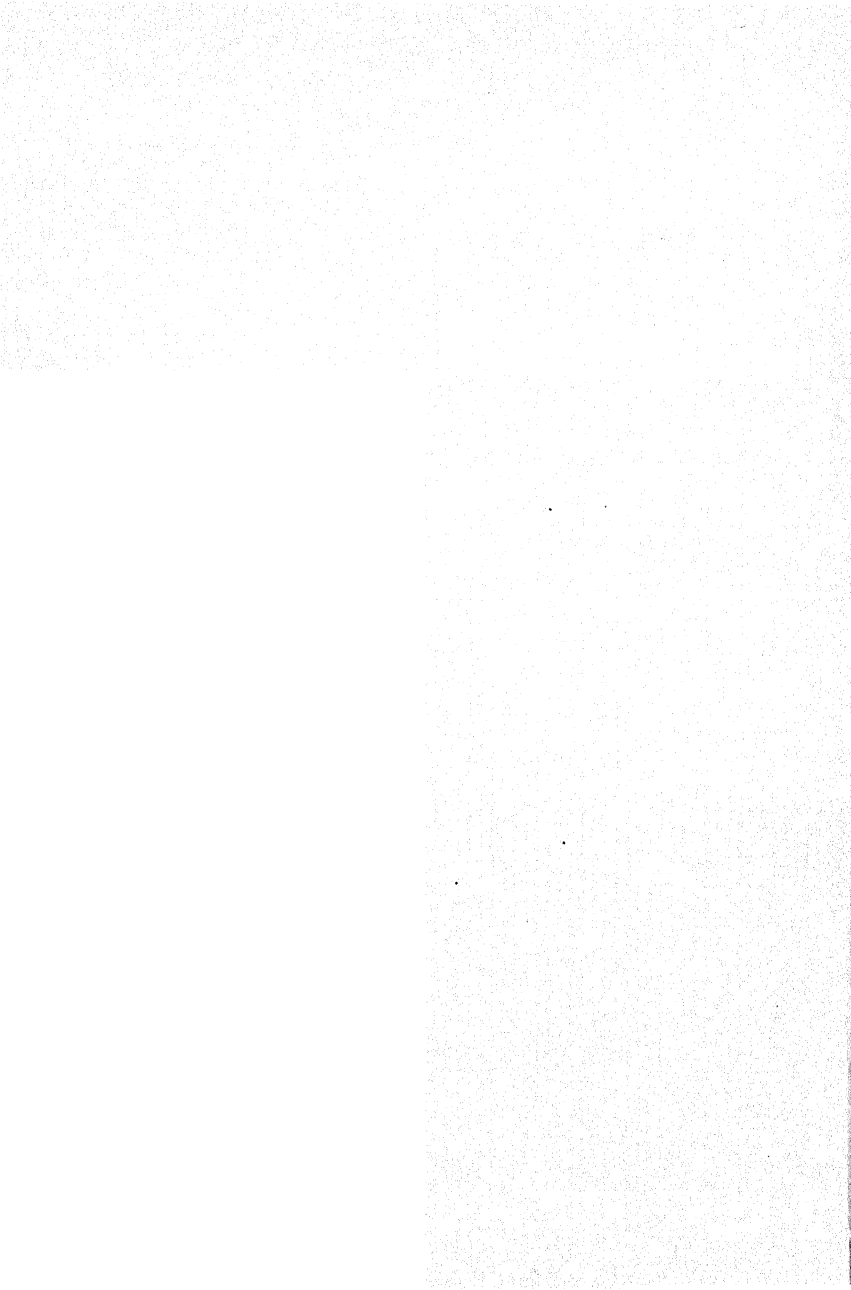
England has become, so monometallists declare, the great commercial centre of the world because of her gold monometallic system; because it is known that English debts are certain to be paid in gold. If by this it is meant that gold monometallic nations must have great advantages in commerce over bimetallic countries, then the assertion may indicate a reason for the commercial supremacy of England in Europe in so far as it was gained during the half-century before 1873. It cannot account for our relative progress during the eighteenth century, because all the great commercial nations of Europe were then bimetallic. And as to the last twenty-five years, the currency systems adopted by our great European commercial rivals are so nearly similar to ours in their general effects, that we are practically competing on equal terms with them in this respect—at all events as far as industrial enterprise is concerned; and, as we should still compete with them on equal terms after the establishment of international bimetallism, it is difficult to see why the change should materially influence our position. In France no doubt silver coin is legal tender to any extent, and if this “limping” standard, as it is called, is in reality a disadvantage to that country, it is one she can remove (at a certain cost) at any time by altering her laws; the existing

system is (or may be) a disadvantage to France rather than an advantage to us, and though we can hardly be expected to advocate reform on the ground that it will place the currency of a rival on a sounder footing, it is questionable if that ought to be a reason for resisting it. If monometallists contend that our currency system has created a general belief that England is less likely than other nations to take any step which would have the effect of a partial repudiation of debts, it may be replied that if this belief really does exist, it is due to our high reputation for commercial honesty, which would remain as an advantage to us under any sound system of currency. If it is contended that our gold coinage gives us an element of superiority in trade over silver-using countries, the advantage, even if admitted, is one likely to diminish as the use of gold monometallism becomes more and more widely extended. But if, as seems to me most probable, our commercial supremacy, such as it is, is due to causes more deeply seated than our currency system—such as our coal supply, our accumulated capital and industrial experience, the two centuries of internal peace we have enjoyed, our naval supremacy, etc.—then no doubt this objection to bimetallism, based as it is on the supposed benefits we have received from monometallism, is quite unsound. It must, however, be admitted that London is the place where gold is obtained with most certainty and ease, and that it is difficult to tell how much this is the cause and

how much the result of London being such an important financial centre. Bankers are, as a rule, especially nervous as to the results of bimetallism; but, as Mr. Goschen has said, the primary cause which makes London the great banking centre of the world, "is to be found in the stupendous and never-ceasing exports of England, which have for effect that every country in the world, being in constant receipt of English manufactures, is under the necessity of making remittances to pay for them."¹ If this is the correct explanation, there is reason to think that our position will be maintained as well under one system of currency as under another, provided that we are at no disadvantage compared with our neighbours in this respect. In any case this is a national and not an international argument against bimetallism. Of course each nation must consider its own interests; France and the United States may desire a low ratio in order to increase the value of their stocks of silver, or may prefer a postponement of any detailed settlement of the question in the belief that silver is about to appreciate in value; other countries may have individual circumstances to consider; but those who come to the conclusion that an international bimetallic system would be an advantage to all nations—*their own included*—must be prepared to sink separate national considerations to a certain limited extent in order to bring about a common agreement.

¹ "The Theory of Foreign Exchanges," Goschen, p. 33.

RISING AND FALLING PRICES.



CHAPTER XIV.

ARGUMENTS BASED ON THE RECENT FALL IN PRICES.

ALL the objections which can reasonably be urged against bimetallism with a suitable ratio have now, I believe, been considered. This is, however, only one side of the argument; for the disadvantages attached to future currency arrangements, if bimetallism is not adopted, must be weighed in the balance. The problematical evils of bimetallism must not be compared with the existing condition of things, for we are passing through a transition period. The saying, "A devil you know is better than a devil you don't know," expresses the spirit of many of the arguments in favour of gold brought forward by those who admit that the present currency arrangements are anything but perfect; but the truth is that the immediate past is, in any case, but little guide as to the future. It is said that bimetallism would be a leap in the dark, but the diagram showing the ratio in the market may well lead any one to doubt which of the two ought to be described in that way—a bimetallic currency policy resembling in many respects that which

A bimetallic future must not be compared with the existing condition of things;

existed for centuries up to the year 1873, or a monometallic policy, the full effect of which has only been observable since the abandonment of the last bimetallic laws at that date. We are now leaping into the dark, if by that is meant that unforeseen dangers may at any moment spring up in our path. One of the great political parties in the United States is advocating the free coinage of silver without waiting for international agreements; and if it be true that the hidden spring of this movement is the desire for a partial repudiation of debts, it must be admitted that such a method of repudiation would have been impossible, and that this cry could not have arisen, as long as the parity of exchange at the old ratio had been maintained by the bimetallic tie. The great change in the ratio which has taken place since 1873 has forced the government of India to adopt a currency system which is defended by absolutely no one, except as a stop-gap. Surely the advent of such unexpected evils as these in the space of only a quarter of a century is enough to justify us in asserting that this is an epoch of great monetary changes.

because
gold will
in future
play a
more
important
part than
it does even
at present.

The closing of the Indian mints is certainly the most striking proof that we are passing through a transition period, for this action was intended to be a provisional step leading directly to gold monometallism. But there are many other signs of instability in the currency arrangements of the world. Russia is moving in the same direction

as India, only even more decidedly. In Japan, a country already accustomed to the idea of a gold coinage, a law has been promulgated for the introduction of a gold standard. China and Mexico remain as the solitary great silver-using countries, and China is likely to be largely influenced by Russia and Japan as to her commercial policy. Such an abandonment of the use of silver by these countries will lessen the demand for that metal, and will increase the demand for gold as its substitute; and this will certainly be a cause tending to produce a still further fall in the gold price of silver. The trouble may not stop here; for, if silver does fall still lower in price, the danger of false coinage may make it impossible for the governments of gold-using countries to maintain the existing token silver coins in circulation. If this proves to be the case, the weight of each token must be increased; the silver coinage will have to be withdrawn to be recoined into a smaller number of pieces. The deficiency in the currency thus created might be filled either by the coinage of additional silver, or by the natural flow of gold into the currency; and, as in these circumstances, silver coins would become inconveniently heavy, the latter seems the most probable contingency. If, therefore, as seems probable, the majority of the existing silver-using countries do definitely adopt a gold standard, not only will they absorb vast additional quantities of that metal for coinage and reserves, but more gold may also be required by

existing gold-using countries. The world appears to be drifting towards gold monometallism, and, in discussing a hypothetical bimetallic future, we must compare it with the probable monometallic future, when gold will both be more in demand and will play a far more important part than it does at present.

The truth of this forecast may, of course, be denied. The Silver Party in the United States may carry their point; and, if the mints are open to the free coinage of silver without international agreements, it is very probable that this would lead to what would, in reality, be silver monometallism in America. And, as to India, it may be urged that the monopoly-rupee system must give way to a true silver coinage. There is, however, nothing in these views to dispel the belief that we are passing through a period of great monetary unrest. And, if it is true that there is to be such reaction in favour of silver, it is evident that the evils due to fluctuations in the rate of exchange will be more severely felt in the future than at present, because the volume of international trade passing between gold and silver-using countries would be vastly increased by such a change. But, in my opinion, a movement in favour of gold is a more probable contingency than a reversion to silver monometallism.

Universal
mono-
metallism
and inter-

Many currency reformers no doubt view the increasing use of gold with complete satisfaction; and it is true that one of the most important benefits to

be derived from bimetallism—the establishment of a common standard of value throughout the world—would be gained equally effectively by means of universal monometallism. The general movement in favour of the gold standard may be said to indicate that this means of curing the evils due to fluctuating foreign exchanges is more easy of attainment than is the establishment of international bimetallism; if this is so, and it can be shown that no serious evils will follow in its train, we have here a strong argument in favour of monometallism. The consideration of the objections to a universal gold standard must, therefore, form an important part of any discussion on bimetallism.

It is often asserted that the recent adoption of gold monometallism by various countries proves that their governments consider that system to be preferable to bimetallism. This statement, however, gives an erroneous impression. Every silver-using country can, at its pleasure, adopt the gold standard; but each, separately, is powerless to bring about a system of international bimetallism with a common ratio. These two courses are not alternatives between which these governments can choose, and all that their action proves is that they consider gold monometallism preferable either to silver monometallism or to bimetallism *without* international agreements. Granting, for the sake of argument, that it is right for any country at this moment to forsake the silver standard, all that this indicates is that the advantage to any nation of

national bimetallism will equally limit the fluctuations in foreign exchanges.

The adoption of gold by silver-using countries does not indicate that monometallism is preferable to international bimetalism.

having the same standard of value as the great commercial nations of the world outweighs the disadvantages, if any, due to the use of gold. Silver-using nations may be right, under existing conditions, in adopting a gold standard; but this does not prove that they would be wrong to adopt international bimetallism, had they the chance of doing so.

The
objections
urged
against the
more ex-
tended use
of gold
depend on
the evils
due to fall-
ing prices.

In considering the evils alleged to be due to the increasing use of gold, we are at once brought to consider various questions connected with the recent fall in prices. No one denies that there has, in Europe at all events, been a great fall in average prices during the last twenty-five years; for a mere glance at any table of Index numbers is sufficient to prove this assertion.¹ Bimetallists, as a rule, advocate their proposals on the assumption that the abolition of bimetallism on the Continent caused a fall in average prices; that the fall in prices caused a depression in trade; and that the re-establishment of bimetallism would, therefore, produce a commercial revival. The argument can hardly, however, be adduced in this form in favour of market-ratio bimetallism; for the introduction of such a system would not even be an attempt to force up prices to their old level. If it is agreed that bimetallism is not to be made an engine for inflating trade, we must accept any injuries that have resulted in the past from falling prices as troubles which time will cure, but for

¹ See Appendix.

which there is no other remedy. But if it is true that the abandonment of bimetallism did cause a fall in prices, and if it is also true that the fall in prices has caused a depression in trade, then it may fairly be argued that the re-establishment of bimetallism will nullify some of the forces still tending to lower prices, and that it will, therefore, have a beneficial effect in lessening such evil influences in future.

To fully consider the fall in prices and all its results, would necessitate a lengthy inquiry into the statistics of trade, and that, as already stated, does not come within the scope of this volume. A general outline of the points raised in the discussion will, however, be given, and to do this it will be convenient to divide the argument into four separate inquiries—

Division
of the
argument
into four
separate
inquiries.

(1) If bimetallism had been effectively maintained, would the fall in prices have been less rapid?

(2) If prices had fallen less rapidly, would it have been better for the general well-being of the community?

(3) Are prices likely to continue to fall too rapidly under existing conditions?

(4) Will the reintroduction of bimetallism check the action of any of the causes tending to produce this fall in prices without producing any evil effects?

If all these questions can be answered in the affirmative, then, we have a valid argument in favour of international bimetallism.

CHAPTER XV.

WOULD PRICES HAVE FALLEN LESS RAPIDLY HAD
BIMETALLISM BEEN MAINTAINED ?

Bimetal-
lists claim
that the
demand for
gold would
have been
less, and
gold prices
would
have been
higher, had
silver main-
tained its
old place
in the
currency
systems of
the world.

THE first question, therefore, for consideration is whether the abandonment of bimetallism in America and on the Continent did cause a fall in prices; or, to put the inquiry in a more logical form, would average prices have fallen less rapidly if bimetallism had been effectively maintained? The bimetallic argument in favour of answering this question in the affirmative depends on the monetary changes which took place in 1873 and in subsequent years. At that date, France took the first step towards the abandonment of the free coinage of silver. The demand for gold also began to increase in Germany at about the same time, because of the substitution of a gold for a silver standard. In the Netherlands, by a law passed in 1875, the adoption of a gold coinage was authorized, and the free coinage of silver, which had been the standard metal till that date, was permanently suspended. By a convention ratified in 1876, Norway, Sweden, and Denmark

adopted a common system of currency, based on the single gold standard; that previously in use having been silver. The demand for gold for the United States was created by the anticipated resumption of specie payment on a gold basis in 1879; the currency had been on an inconvertible paper basis for many years before that date; but, as regards the state of the law, it had been bimetallic till 1873; and, had specie payment been resumed without any alteration in the law, the demand for gold would probably have been less. Thus there have been many demands for gold which would not have been felt had silver been allowed to occupy its old place in the currency systems of the world; and the effect of these demands has been, according to the bimetallic view, to raise the value of gold, and therefore to lower the price of all things measured by gold as a standard. Prices, according to this view, would have remained stationary, or, at all events, would have fallen less rapidly had bimetallism been maintained.

The reply most commonly made by monometallists to this argument is that production has increased enormously during the last twenty-five years, and that this is the true explanation of the fall in prices. The recent fall in prices is said to be due to increasing production.

In examining this contention, it is necessary to be extremely careful as to the exact meaning which it is intended should be attached to the various words employed; for there is no more fruitful source of confusion than the use of terms with vague

significations. It will be as well, therefore, first to clear the ground in this respect.

Definition
of value.

The "value" of any object means, according to modern economists, the power of purchasing other commodities which the possession of that object conveys. If we imagine a minute sample of every commodity, using the term in its widest sense, to be thrown together as one lot on the market, the size of the sample in each case being in proportion to the amount of business done in that commodity; and if we also imagine a commodity which always agreed in value and in price with this lot of samples, we may conveniently give the name of "the average commodity" to this hypothetical substance. The value of any object will then be measured by the amount of the average commodity which can be obtained in exchange for a given measure of the object in question. And, as this is a general definition, it must also be true in the case of gold, silver, and paper notes; that is to say, it holds good of all things whether they happen to be used as standards of value or not. Thus the value of gold is measured by the amount of the average commodity which can be bought for a sovereign.

Definition
of price.

The "price" of a commodity is the number of units of the standard of value which have to be given in exchange for a given measure of the commodity in question; in fact, it is the amount of money for which it can be bought. In order to connect the terms "price" and "value," let it be

supposed that the exchange here contemplated is not made directly, but that both the money—let us say the sovereigns—and the object are first exchanged for the average commodity. It has been seen that each sovereign will exchange for the amount of the average commodity which may be taken as representing the value of gold; and the object to be bought will exchange for an amount of the average commodity which represents its value. From this it is evident that the price to be paid is determined by the number of measures of the value of gold which go to make up the measure of the value of the object in question. That is to say, *price is the ratio of the value of the commodity in question to the value of the standard*; and price will vary with every change in the value of the commodity, and inversely with every change in the value of the standard. To many minds this will seem to be almost self-evident; but the proof has been given *in extenso* because it is a fundamental proposition without which the whole subject is chaos.

The following may perhaps be given as a useful illustration of the confusion due to the inaccurate use of words. The price of a commodity, according to the definition just given, is the amount of money which has to be given in exchange for a unit measure of the commodity in question; and from this it follows that the measure of average prices is the amount of money—the number of sovereigns—which has to be given in exchange for a unit measure of the average commodity. But it was

The value of the standard and average prices are measured in the same way, one being the reciprocal of the other.

seen that the value of gold is measured by the amount of the average commodity which can be obtained in exchange for a unit of the standard of value—for a sovereign. Thus “average prices” and the “value of gold” mean exactly the same thing, only they are measured in opposite ways; or, in more accurate words, one is the reciprocal of the other. And when we hear the candid monometallist remark that he is prepared to admit that the fall in average prices may have something, though it cannot have much to do with the value of gold, we can see that either he is talking absolute nonsense, or else that he is giving some unknown meaning to his words.

With in-convertible notes, prices will normally fall in proportion to the increase of money transactions.

After defining the words to be used, the question in hand—the effect on average prices of an increase of production—can now be considered. The level of average prices is measured by the amount of the standard of value which has to be given in exchange for a given amount of the average commodity. If inconvertible notes form the standard of value; if the number of notes in circulation does not alter; and if all other things, including the state of credit, remain the same; then the increase of business transactions, which must accompany any increase of production, will cause an increase in the demand for these notes, without any increase in their supply; this will raise their value; and this rise in the value of the standard is the same thing as a fall in prices. This is, in fact, the simplest example of the quantitative theory of prices. The rapidity of the fall in

prices measured in inconvertible notes will roughly approximate to the rapidity of the increase in production; or, more accurately, to the increase in volume of business transacted; because, as the number of transactions increases, the proportion of the fixed note circulation utilized in each transaction must diminish proportionately to that increase. An increase in the value of inconvertible notes when their number is diminishing has frequently been observed; and as this fact is capable of the same explanation as that given above, it helps to prove the truth of the foregoing argument.

Very different results may, however, follow an increase of production if any article of merchandise is used as the standard of value. If our money had been made of aluminium, or if wheat had been used as the standard of value, then average prices would have risen enormously during recent years; these articles have fallen in price more than the average, and therefore more of them would have to be given in exchange for a given amount of the average commodity; that is to say, they have fallen in value, and prices, if measured by them, would have risen. If we had had an aluminium coinage, it might well have been said that the effect of modern mechanical and scientific progress had been the cause of phenomenal rise in prices. On the other hand, it has been asserted that prices remained nearly stationary for several years with silver as the standard; whilst there has been a steady and continuous fall in gold prices for a very long period.

But with an article of merchandise as the standard, prices may either rise or fall if production increases.

If the value of the standard rises, prices fall; and *vice versa*.

Thus, when production is increasing, the effect on prices varies greatly with the standard of value used. The value of any commodity depends on the demand for and on the supply of that commodity. When changes are taking place in the factors of production, the variations in supply and demand will cause some substances to rise in value and others to fall. And as the value of the standard is the same thing as average prices, only measured inversely, it follows that if the standard of value is a substance which rises in value in these circumstances, then average prices will fall; and if the standard falls in value, average prices will rise. This briefly gives the clue to the whole question.

A general increase of production tends to produce a rise in the value of the precious metals, and therefore a fall in prices.

The "supply" of a commodity is, of course, a very different thing from its annual production. The supply is the amount on the market, or readily available to be brought on the market, and the supply in this sense may take years to accumulate. The stock of gold in the world is the result of centuries of production; and it follows that even a large proportional increase in the annual output of that metal would cause but a very small proportional increase in the supply. With commodities, generally, this is not the case; and a given proportional increase in production would, therefore, cause a greater proportional increase in the supply of the average commodity than in the supply of gold. But when the supply increases, the value normally falls. Thus a general increase of production will cause the value of gold to rise in comparison with the value of the

average commodity ; or, in other words, more of the average commodity will be exchangeable for a given quantity of gold, and there will be a fall in average prices. Then, again, looking to the question of demand, the market is very easily glutted with commodities of which there is a limited consumption, such as wheat, for example ; and a small increase of production in such cases would cause a relatively great fall in price. In the case of the precious metals the demand is less easily satisfied, and a given increase of production will cause a comparatively small fall in price. Gold cannot, of course, fall in gold price ; but, by reasoning similar to that just given, it is evident that gold will rise in value in the case of a uniform increase of production of all things, even including gold. Thus, as regards both supply and demand, if the output of gold were to increase proportionately to the increase of the output of commodities in general, it would seem that the value of that metal would tend to rise, and that prices as measured by that standard would therefore tend to fall.¹

The result of this investigation is to show that monometallists are right in asserting that an increase of production is a cause tending to produce a fall in gold prices. But to agree with them thus far in no way affects the answer to be given to the

But even if this is so, all other causes affecting the value of gold must have their due effect on prices ; and prices would now

¹ This argument may not apply to a permanent and steady increase of production, lasting for a very long period. See Prof. Edgeworth on "Monetary Reform" in *Economic Journal* for September, 1895.

be higher
had bi-
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question under discussion. Price is a ratio—the ratio of the value of gold to the value of the commodity; and what we have to inquire is whether any causes have been at work tending to raise the value of gold which would not have been in operation had bimetallism been effectively maintained. No matter what can be proved as to the effect of any general increase of production on the value of various commodities, it will still be true that prices would have been higher if any independent cause tending to raise the value of gold had not been operative. It is not, as a rule, contended that the abolition of bimetallism actually caused an increase of production; production would have increased in the same way under a bimetallic *régime*; and, if this is so, so far as the comparison between the present level of prices and the level of prices under bimetallism is concerned, the direct effect of the increase of production in recent years may be neglected as being equally applicable to both cases. After what has been said as to the way in which various countries have increased their demands for gold for coinage purposes since 1873—demands intimately connected with the abolition of bimetallism—it cannot be denied that new forces have been brought into play tending to raise the value of gold; and it is therefore, as it seems to me, equally impossible to deny that all prices now measured in gold would have been higher had bimetallism been maintained.

Of course these arguments may be met by the

assertion that the ratio could not have been maintained under any circumstances. This is, however, to reopen the questions already disposed of in Chapters I. and II. If the United States and France had maintained their bimetallic laws, without succeeding in maintaining the legal ratio as the ratio between the value of the metals in the market, these countries would have found themselves, in fact, on a silver basis. But, even in that case, the demand for gold would have been less than it has been; the value of gold would have been lower; and gold prices would have been higher than at present, though not as much higher as if the relative value of the metals had remained unaltered.

The authority of the Gold and Silver Commission has already been frequently quoted, and it may be interesting to note the opinion of the commissioners on this important point. The monometallic members of the Commission only went so far as to state that the recent "fall in the price of commodities may be in part due to an appreciation of gold,"¹ by which they probably intended to indicate their belief that the more extended use of gold, together with its lessened output, may have been amongst the many causes of the fall in prices; though why a doubt arose in their minds is not apparent. To what extent this one cause had been operative, they thought it "impossible to determine."

The Commission, however, unanimously reported that they were "irresistibly led to the conclusion

Views of
the Gold
and Silver
Commis-
sioners.

If a Bi-
metallic
Union had
continued

¹ Final Report, p. 83.

to control
the ratio,
either gold
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have been
higher or
silver prices
must have
been lower;
probably
both results
would have
followed;

that the operation of" the Bimetallic Union had "exerted a material influence upon the relative value of the two metals." This conclusion appears to me to involve the admission that, if a powerful Bimetallic Union had been maintained, it would have continued to have had a material influence on the ratio; that is to say, that it would have prevented the fall in the gold price of silver either entirely or to a *material* extent. It follows, therefore, as regards all goods influenced by the trade between gold and silver-using countries, that either their gold prices would have been higher; or that their silver prices would have been lower; or that both results would have followed. One of these results must inevitably have followed the maintenance of the Bimetallic Union, granted its controlling influence; and, as it seems probable that the effect of bimetallism would have been felt in both silver and gold-using countries, this view of the case tends to confirm the belief that, but for the action of the Latin Union and of the United States, gold prices would everywhere have been at a higher level, and silver prices would everywhere have been at a lower level.

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But if we inquire, not only whether, but also to what extent prices would have been higher under any supposed conditions, then we enter a region of extreme doubt. I myself have never seen how such problems can be satisfactorily solved; we can do no more than give vague indications of the answer.

The arguments based on the increase of production appear to imply that monometallists believe

that prices would, in any case, have fallen nearly as much as they have done, and that the abolition of bimetallism produced but little effect. It may be noted, by the way, that if this deduction is admitted by monometallists, it weakens their plea against the restoration of the old ratio on the ground that it would cause a disastrous rise in prices, and it would, therefore, be an act of robbery. If the abolition of bimetallism produced no fall in prices, why should its restoration cause a rise? But a logical argument to prove that the increase of production is the main factor to be considered in estimating the level of prices under different conditions would run somewhat as follows. If it could be said that we have an accurate record of the rate of the increase of production for a long period, and if it could be shown that the variations in average prices coincided more or less closely with the variations in the rate of the increase of production, then we should have the strongest evidence, not only that the two were intimately connected, but that all other factors might be more or less completely neglected in estimating future prices. This would be logical, but, unfortunately for those who would use such an argument, it would be entirely unsupported by facts. We have not an accurate record of the increase of average production even in the principal commercial countries of the world; and, as far as can be seen, the variations in average prices have not coincided at all closely with the variations in the average output. No one denies that the amount of commodities

production had been the main factor, then variations in prices would have coincided closely with the variations in production; but this has not been the case.

produced in 1884 was vastly greater than the amount produced in 1854; yet wholesale prices in England were at about the same level at these two dates. It is true that prices have been falling heavily since 1873; and, to account for the fall in prices having commenced at the date at which bimetallism was abandoned on the Continent, it is asserted that production has been increasing more rapidly during the comparatively peaceful period since that date than it did during the disturbed times between 1850 and 1873; also that a period of inflation, such as that of 1871-1873, is naturally followed by a corresponding period of depression. To these contentions, bimetalists reply that the increase in the rate of the increase of production since 1873 has not been proved; that, in any case, it is not denied that there was a great increase of output in 1884 as compared with 1854, without a corresponding fall in prices; that the steady decline in prices since 1873 does not in the least bear the character of an ordinary period of depression in trade; and that this fall has been more severe than any which has occurred for many years.

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The above is a brief outline of the arguments used by the contending parties. Though the subject is one of great complexity, it is quite evident, in my opinion, that other factors of great importance, beside the increase of production, have greatly affected the general level of prices. Looking to the century as a whole, there can be no doubt that prices have shown a general downward tendency

which is quite consistent with the view that an increase of production tends to produce that result. But the rise in prices which took place after 1850 had every appearance, and was at the time believed to be due, in great measure, to the Australian gold discoveries. The severity of the fall in prices since 1873 is certainly consistent with the view that the increase in the demand for gold since that date has materially augmented the fall in prices which the increase in production would have tended to have produced. All these considerations seem to me to make it certain that average gold prices have been materially affected by the conditions primarily affecting the currency, and that they would now be considerably above their present level if bimetallism had been effectively maintained.

Before passing on to consider the question discussed in this chapter from a somewhat different point of view, the commonest, but, as it seems to me, the most feeble argument in favour of the belief that the recent fall in prices has had little connection with the various changes in the laws of currency, must be mentioned. It is often urged that if the recent movements in average prices "were due to the appreciation of gold, surely the fall in the price of all articles would be universal and would be uniform;" and, as this has certainly not been the case, we must look elsewhere for an explanation of the phenomenon.¹ Here, again, the

with the view that gold prices would have been higher had bimetallism been maintained.

It is urged, in reply, that the fact that prices have not fallen uniformly proves that this fall was not due to any cause affecting the currency.

¹ See, for example, the speech of Sir M. Hicks-Beach in the House of Commons, on March 17, 1896.

word appreciation is used in some ill-defined sense, for an appreciation of gold is a general fall in prices according to the definition here adopted. Probably what is implied by such observations as these is the belief that the causes which have been mentioned as being likely to influence the value of gold, and therefore to influence all prices alike, have not in reality had the effect attributed to them. In such matters as these, many minds are influenced by analogies, though the analogy is often but half worked out. In this case, a rise in the value of gold may have been likened to the effect of a tide, which sweeps all floating objects at a uniform pace in one direction; whilst the movement in particular prices may have been compared to boats moving under other forces on the surface of the moving water. If we were to notice a considerable amount of movement amongst rowing boats on a tidal river, some few moving up, but the majority moving down stream, we might, perhaps, be tempted to argue that there could not be a very strong tide running, or all would be swept together in one direction. Arguing in this way, it might be urged that the causes affecting gold cannot have had much influence, or all prices would have simultaneously fallen in a nearly uniform way. But, returning to the simile of the tidal river, all we should, in reality, know as to the tide would be that it could not be running very fast *as compared with the average movement of the boats* on the water; and, from this analogy, it may truly be

said that the alterations in the causes affecting the value of gold cannot be very great as compared with the average alteration in the causes affecting the values of particular commodities. This, however, gives ample margin for a considerable effect being produced by the causes primarily affecting gold.

But this analogy, or others like it, must be used with great care; for it is wholly false in one very important particular. The visible movement of the boats is the movement produced by the rowers subtracted from (or added to) the movement produced by the tide; whereas price is a ratio, and the alteration in the price of any commodity is the result of the effect of the causes primarily affecting the value of that commodity divided (or multiplied) by the effect of the causes primarily affecting the value of gold. No alteration in the value of gold will directly affect the ratio of the prices of any two commodities; and it is not easy to see, therefore, how any change in such relative prices can give us any certain clue to the changes in price due to causes primarily affecting the value of gold.¹

But the divergence in particular prices does not prove the absence of causes affecting all prices.

¹ This argument is capable of mathematical demonstration. Let a and b be the values of the commodities A and B; let x be the value of gold; then $\frac{a}{x}$ and $\frac{b}{x}$ will be the prices of A and B. The price of A will, therefore, be to the price of B as a is to b ; and, as this ratio is independent of x , it can be seen that no variation in x , the value of gold, can cause any variation in the relative prices of A and B. And however accurately we may know the variations in the ratio $\frac{a}{b}$, we cannot ascertain the variations in x therefrom.

CHAPTER XVI.

CREDIT, AND THE QUANTITATIVE THEORY OF PRICES.

It is necessary to prove that the views expressed in the last chapter are in harmony with the quantitative theory.

IN discussing the way in which the general level of prices would have been affected by the retention of bimetallism, prices have thus far been regarded as being measured by the ratio of the value of particular commodities to the value of one standard commodity. According to the quantitative theory of prices in its crude form, prices are, however, said to be determined by the quantity of money in circulation; and it may be as well to show that this theory is not antagonistic to the views expressed in the last chapter, if it is correctly interpreted. At the same time, it will be possible to discuss certain objections which have been raised in opposition to the views of bimetallists as to the effect on prices of the recent changes in the laws of currency; though the discussion is rendered difficult by the vague way in which the objections are generally brought forward.

It is denied that the new de-

It has been seen that, during the last twenty-five years, a number of countries, including the United

States, France, and Germany, have altered their monetary systems, making gold the sole standard. Bimetallists believe that if the continental bimetallic systems had been effectively maintained, more silver would have been coined, and less gold would have been used by these nations; and they argue that the additional amount of gold thus left available for currency purposes would have been used in the currencies of gold-using countries, and that it would, in accordance with the quantitative theory of prices, have maintained prices at a higher level than that to which they have now fallen. In reply, it appears in the first place to be suggested that, granted the correctness of the views here expressed as to the demands for gold in countries formerly bimetallic, it is not certain that the volume of gold in the English currency, for example, would have been greater had these demands never been created; and that, even accepting the quantitative theory of prices, it cannot, therefore, be confidently asserted that prices would have been higher under bimetallic conditions.

If it is agreed that more gold has been absorbed into the currencies of countries formerly bimetallic than would have been the case had the continental currency system remained unaltered, the question is, where would that gold now be had it not been thus absorbed? This is the first point for consideration. It is obvious that either it might now be in the earth, and not yet available for use in any way; or it might now be swelling the currencies of England and other gold-using countries; or it might now be

mands for gold have lessened the amount of gold in circulation in gold-using countries.

The gold thus absorbed might now be either in the earth, or used in the arts, or in the currencies.

employed in the arts. Each of these three suppositions must be considered separately.

The increase in the demand for gold can only have been partially satisfied by an increase of output.

With regard to the first of these alternatives, if it is asserted that all the gold now added to the foreign currencies would still have been in the earth had no monetary changes taken place, it is evident that this is equivalent to stating that these recent demands for gold have been completely met by an increase of output. If no changes had taken place in the currency systems of the world, it is certainly possible, and it seems to me most probable, that the output of gold would have increased nearly as much as it has done; and it is important to note that it is only the increase of output, which would *not* have taken place had bimetallism been maintained, which should be taken into consideration in the comparison between the present volume of gold and the volume which would now have been in existence under bimetallic conditions. But if these new demands for gold did, as bimetallists believe, raise the value of that metal, then it is no doubt true that the gold industry has had an additional stimulus applied to it; and that the output of gold may have been increased in this manner, thus partially satisfying these new demands for the foreign currencies. But these demands cannot have been entirely satisfied in this way; for any such additional output of gold can only result from an increase in the value of gold due to the extra pressure of such demands; and if the demands had been quite satisfied by the additional output, there

would be no reason for there being any such extra pressure, or any such additional output. Moreover, the stimulus to the gold industry has in all probability not been very effective; because it can only have acted with much force in the case of mines where the receipts and expenditure nearly balance each other, which is probably the case in only a minority of instances; for all other mines would have been kept fully active in any case. Thus the idea that the new needs of foreign countries have been supplied to any material extent by an increase in the production of gold, which would not have taken place under a bimetallic *régime*, may be dismissed; and it must be admitted that, but for the currency legislation on the continent and in America, there would at the present time have been more gold either in the currencies of other gold-using countries or in use in the arts in various parts of the world.

When gold is required for foreign currency purposes, the part which comes from England will no doubt, in the first instance, be taken from the banking reserves or the currency rather than from the metal in use in the arts, using that word in its widest, and now somewhat obsolete, meaning. Assuming the quantitative theory of prices to be true, prices will therefore be lowered in consequence of any such foreign demands; that is to say, that these demands will have the effect of making a larger amount of commodities exchangeable for a given quantity of gold. At present, people are willing to give a certain amount of commodities for a certain amount

Extraneous demands for gold will lessen the amount of metal both in the arts and in the currency; and will thus lower prices.

of gold for use in the arts; but if only a diminished quantity of gold could be obtained for the same amount of commodities (*i.e.* if prices were falling), there would, other things remaining the same, be a decrease in the use of that metal in the arts, and a corresponding increase in the amount available for the currency. Thus, when prices are lowered by money being taken out of the currency for foreign export, the effect of the fall in prices is that a certain amount of gold is withdrawn from the arts, and that the demand is thus partially satisfied. On the other hand, if the gold for export should in reality be taken directly from the bullion market or from the arts, it is evident that the result would be to raise the value of gold as an article of merchandise, without at first raising the value of the sovereign. Sovereigns would, however, immediately be melted down, and the void created in the bullion market would thus be partially filled; and this abstraction of gold from the currency would lower the level of average prices. In whatever way we imagine the extraneous demands for gold to be satisfied, it is therefore evident that in the end the result of such demands will be a lessening of the gold in circulation, and, granting the truth of the quantitative theory of prices, a fall in average prices; though the fact that gold is an article of merchandise as well as the standard of value will to a certain extent mitigate the fall.

The extended use
of credit

In the foregoing argument, the truth of the quantitative theory of prices has been assumed; but

the right to make any such assumption is denied. In a former chapter it was proved that, in a very primitive state of society, prices would depend on the quantity of money in circulation, and that, under such conditions, a diminution in the amount of money would cause a fall in prices, because there would be less money available for each transaction. In that discussion it was assumed that an issue of inconvertible notes was the only form of money in use. But, in considering the application of the quantitative theory to modern times, the effect of the use of such credit instruments as cheques, fiduciary notes, bills, book-entries, etc., becomes of the highest importance. The arguments which were used to prove that prices vary with the quantity of money in circulation depended on the fact that the inconvertible notes, when one transaction had been completed, would be certain to be used again immediately because, being valuable, they would not be allowed to lie idle. If this was the case with all forms of money in circulation, each transaction would employ a definite proportion of the whole currency, and there would be a definite proportional relationship between the volume of the currency and the level of average prices. But these assumed conditions as to the continuous circulation of money no longer hold good; notes, when returned to the bank, are not certain to be reissued; cheques are, as a rule, created and destroyed at each transaction; and, when business is done by book-entries, there is no transfer of anything

was not considered in discussing the quantitative theory of prices.

which can be called money, even in the widest sense of the word. It is, therefore, suggested that no reliance can be placed on the quantitative theory of prices, for the conditions on which its proof is based are no longer fulfilled. Moreover, as prices vary immensely with the state of credit, and as the actual transference of gold now takes place in only a minute fraction of all business transactions, it is urged that it is credit, and not coin, bullion, or notes, which regulates prices.

In the objections to this theory it is assumed that there is no relationship between the volume of money transactions and the amount of coin in circulation.

In discussions such as these, the true difficulty is to get a clear issue between the contending parties. Here the real question underlying these doubts as to the truth of the quantitative theory of prices is whether, at any one time, there is or is not a definite quantitative relationship between the amount of coin in circulation and the total *money value* of the business being transacted by aid of the currency in question; that is to say, whether an increase or a decrease of the one will always, other things remaining the same, be accompanied by an increase or a decrease of the other. It is easy enough to see, by aid of a numerical example, that if there is such a relationship, the quantitative theory of prices is right in principle, however extended may be the use of credit. Let it be assumed that transactions, which would involve the transfer of 200,000 sovereigns if conducted in coin—which may be called transactions to the money value of £200,000—are being carried through by the use of only £4000 in gold, or with that sum of coin as

a basis; then, on the supposition that a quantitative relationship exists between the money value of the transactions and the amount of gold in circulation, and that this relation is one of simple proportion, it follows that if the coin is reduced to £2000, the business transactions must be reduced *in money value* to £100,000. Now, if all other things remain the same, the amount of commodities changing hands in the two cases must be the same; and it is evident, on these suppositions, that prices must be halved at the same time that the amount of gold in circulation is halved. In fact, after the reduction of the amount of coin in the above example, the half-sovereign will, on these assumptions, have the same value as the sovereign had before the reduction; and 4000 half-sovereigns will then play the same part as the 4000 sovereigns did previously. If such a relationship exists, prices will therefore vary as the quantity of coin in circulation, even if every transaction is made by cheque or book-entry, and however small may be the fraction of business transactions in which gold actually passes.

In passing on to state the reasons for believing that some such relationship does exist, it must first be admitted that any alteration in the amount of coin available, contrary to the assumptions just made, does in all probability cause a temporary alteration in the rate of production, and therefore in the quantity of commodities being exchanged through the medium of money. But in speaking

of the level of prices resulting from any change in the currency, what is meant is the level that prices would ultimately attain when trade had returned to its normal condition, if all other things remained unchanged; and trade would ultimately return very nearly to its original normal condition if no other change besides that connected with the currency were to take place, because the amount of counters used in business transactions cannot ultimately govern the amount of human energy displayed. Moreover, it cannot, I think, be proved that the relationship between the volume of the currency and average prices is one of simple proportion as indicated in the above example; though I see no reason for thinking that any other relationship is more likely to hold good. But if it can be shown that the amount of the standard of value in circulation and the money value of business transactions are tied together in any manner so that an increase or a decrease of the one must be accompanied by an increase or a decrease of the other, then it follows that prices will rise with an increase of coin; and that gold prices would have been higher had the state of the foreign currencies allowed more gold to remain in circulation in gold-using countries.

Prices are constantly varying without any variation in the amount of coin in circulation

In considering the effect of credit on prices, a distinction must be made between two different kinds of influences; though, as between other distinct things, the line of separation is often hard to determine. On the one hand, there is the slow growth of modern commercial methods, leading to the more

and more extended use of credit instruments in place of gold ; and, on the other hand, there is the constant expansion and contraction of credit, due mainly to variations in the state of commercial confidence. With regard to the latter of these influences—the variations in commercial confidence—no doubt a general increase of credit, if considered separately, appears to be a force tending to raise prices. “The demand which influences the prices of commodities consists of the money offered for them.” The purchaser “may make purchases with money which he only expects to have, or even only pretends to expect. He may obtain goods in return for his acceptances payable at a future time ; or on his note of hand ; or on a simple book credit, that is, on a mere promise to pay. All these purchases have,” according to Mill, “exactly the same effect on price, as if they were made with ready money ;”¹ and such purchases no doubt increase with an increase of credit. This explanation, however, it seems to me, is not strictly accurate ; for the effect on prices appears to be due to the action of the resultant of several forces. On the one hand, an increase of business due to an increase of credit causes an increase in the demand for gold, both for use in the arts, and to serve as a basis for these additional transactions in gold-using countries ; and this increase in the demand for gold raises the value of that metal as measured by its exchangeability with the average commodity. On the other hand, there

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¹ Mill's "Political Economy," vol. 2, pp. 51, 52.

is the above-mentioned increase in the demand for all other commodities, which raises the value of commodities, in general, in comparison with gold. And the change in the level of prices will depend on the equilibrium established between these opposing forces. The demand for gold as an article of merchandise is, however, very inelastic, and will not increase greatly in times of inflated trade; moreover, the general increase of confidence in the times of increasing credit induces the mercantile world to undertake business with a smaller stock of coin to meet a given amount of liabilities; and, for both these reasons, the demand for the average commodity increases more rapidly than the demand for gold; and this means a fall in the value of gold, or a rise in average prices.¹ But, whether this is the true explanation or not, it can hardly be denied that commercial confidence and the state of credit are constantly varying, and that prices vary accordingly, even when there is no alteration whatever in the amount of coin in circulation.

Some money transactions are, no doubt, made without any regard to the volume of the currency;

This constant variation in the level of prices, without any corresponding variation in the basis of

¹ If iron were the standard of value, a general increase of confidence might be followed by a fall in prices; because, in these circumstances, the demand for iron increases more rapidly than the demand for the average commodity; iron might then rise in value, and, if so, prices as measured by iron would fall. The reserves of iron in the banks (if such an idea is conceivable) would be used up rapidly in trade at such times, thus, in harmony with the quantitative theory of prices, reducing the amount of the standard "coin" in circulation.

coin, in no way proves, however, that, for a given condition of commercial confidence and of the other variables, there is not a definite quantitative relationship between the volume of the currency and prices. It is true, no doubt, that as regards some business transactions, there is no such direct relationship; for additional sales and purchases may take place without even the most indirect use of money, and therefore without creating any additional demand for the commodity selected as the standard of value. An increase of business of this description will have no direct effect on the value of the standard, or on average prices measured thereby. This is, I think, obviously the case when cross payments are made for a simultaneous exchange of commodities by a mere balance of book-entries; for this is really a case of barter, the documents used in such transactions being mere certificates of relative value. If, with such book-entries, the value of wheat, for example, was used as the standard of comparison, there is no reason why an increase of these entries should have any effect on the demand for wheat; the value of wheat would be unaltered by any increase in these transactions, and so would prices as measured by wheat. Prices in such transactions are measured solely by the value of the standard as an article of merchandise, and have no direct connection with the amount of coin in circulation. On the assumption that a state of society may exist where all transactions are made by book-entries of this type, it becomes hardly possible

to discuss whether, in these circumstances, an increase of the currency would affect prices, for there would be no necessity for the existence of a currency at all; the £1,600,000,000 worth of gold and silver coins would all have disappeared from circulation; and prices would be regulated by the value of the standard as an article of commerce; that is, in the case of a gold standard by the value of gold, and, in the case of an inconvertible paper standard, presumably by the value of waste paper; proof enough that we are very far from such an imaginary state of things. No doubt, under such hypothetical conditions, when all transactions would be done in credit, there would still be a rise in gold prices with an increase of confidence; but this would have nothing to do with the currency; it would be entirely due to the different way in which the metal gold and the average commodity would be affected by the general increase in trade.

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But the special point to be noted in the foregoing paragraph is that it must be admitted that a proportion of all money transactions is conducted without any regard whatever to the amount of coin in circulation. The effect on the problem in hand of the existence of such transactions may best be illustrated by returning to the numerical example above given. Out of the transactions to the money value of £200,000, which are supposed to be negotiated in a unit of time, let it be assumed that transactions to the money value of £50,000 are carried out by simultaneous book-entries, or by

some other method having no regard to the volume of the currency ; and, as to the remaining £150,000 worth of transactions, that there is a definite proportional relationship between their money value and the amount of coin in circulation, which was assumed to be £4000. Now, if the coin is reduced so that only £2000 remains permanently in circulation, other things remaining the same, then, *ex hypothesi*, the money value of this latter fraction of the total transactions will fall to £75,000, and the price paid for all commodities included in these transactions will be halved. This means that the value of the gold in the coinage will be doubled. But the value of gold as an article of merchandise must be the same as the value of the gold in the coinage ; and, as prices in the balance of the total transactions, formerly worth £50,000, are regulated solely by the value of gold as an article of merchandise, these prices will be halved also ; and prices in all commercial transactions will be affected alike. Thus, if with regard to a definite fraction of all business transactions, there is a definite quantitative relationship between prices and the volume of the currency, then there is nothing in the existence of even a very large proportion of transactions of the nature of simultaneous book-entries to shake the belief in the general principle of the quantitative theory of prices.

And surely no man of business will deny that a very large proportion of all monetary transactions are affected by variations in the amount of the

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standard of value available. In most instances the connection between prices and the volume of the currency is indirect and is difficult to trace through the ramifications of commerce; and it is undoubtedly true that, on the average, the basis of coin for a given volume of transactions is exceedingly minute. All mercantile engagements, under the present legislation in England, involve promises to pay in gold; and, according to Mr. Goschen, "it is of the highest importance to the whole banking and mercantile community, with the view to the certain fulfilment of such engagements, that the aggregate stock of bullion in the country should suffice to meet all wants." The amount of credit transaction depends entirely on the sentiment and will of the great body of creditors; one creditor may rely on another, but the ultimate creditors pay the greatest attention to the amount of coin available—to this matter which is to them of the "highest importance." If the available coin increases, there will also be an increase in the money value of the advances made by the ultimate creditors; and the two will, as I think, ultimately increase in the same proportion. But, in any case, if both these variables do increase simultaneously, it will be according to some economic law; and a definite, though possibly a variable, relationship between the coin available and the total credit transactions will continue to exist. To deny that there is a relationship is equivalent to saying that bankers and others in gold-using countries are just as ready to advance

money when they have little gold at their command as when large reserves of specie are available, either in their own hands, or held for them by others. If we trace credit to its roots, we shall find that there is always or nearly always some negotiation in which the possibility of having to find coin or bullion to meet the liability must be present in the minds of the financiers engaged. And the eagerness with which the Bank of England reserves are watched at all times, and the serious consequences which follow an exceptional rise in the rate of discount consequent on any exceptional variation in the quantity of gold held in reserve, prove that the amount of gold in the country is a factor of the utmost importance in regulating credit. Commercial confidence varies immensely, and prices vary with the state of commercial confidence and with other variables; but, for a given condition of all these variables, the forces just described must, it seems to me, create a fixed relationship between the amount of coin in circulation and the total money value of a very large proportion, at all events, of all the money transactions in which the standard in question is used, either in the form of coin or of credit instruments; and, other things remaining the same, this relationship will make prices, not only in the transactions in question, but throughout all commerce, vary with the volume of the currency. No doubt it cannot be assumed that other things will remain the same. If, for example, the currency is increased by an increase of the banking reserves,

then discounts will be lowered, and a stimulus will be given to trade. The number of business transactions will at first be increased; but, as already remarked, it is impossible to believe that the number of counters used in trade will ultimately affect human energy; and it is certain, therefore, that, in a more or less considerable time, the inflation of trade will subside, and the number of transactions will sink back to very near their former level, assuming that the other conditions of commerce remain unaltered. And if the money value of all credit increases, and if the number of transactions remains the same, it is only possible to reconcile these two conditions by a rise in prices. In fact, however largely credit instruments may be used in commerce, an increase or a decrease of the currency will be accompanied by a rise or a fall in prices, if all the other conditions remain constant.

The recent fall of prices is not connected with credit.

If an average of prices is taken over a sufficient number of years, it is evident that it will cover periods of commercial confidence and of commercial depression. We shall, therefore, with such an average, get a level of prices independent of the particular variable under discussion; that is, independent of the factors which cause inflations and restrictions of trade. If the period of the average is not a short one, it can be shown that average wholesale prices have fallen continuously since 1873; and the cause of this fall can hardly, therefore, be connected with the state of credit. But even if it could be shown that during these years there had been a decline in

commercial confidence, and that this decline had lowered prices, the proof of this fact would hardly affect the question under discussion. It could not be held that this decrease of confidence was due to the abandonment of bimetallism on the Continent or in America; if the Latin Union had continued to control the ratio, the factors of credit would have been in the same condition as they are now; and neither the comparison between the existing state of things and the state of things which would have existed had bimetallism been retained, nor the conclusion previously reached, that gold prices would now have been higher in the remaining gold-using countries had more gold remained in their currencies, are in any way affected by these considerations.

But, as already noted, there is another variable element connected with credit which has to be considered; an element which has little or nothing to do with the forces which create periods of depression or inflation. The difference between this subject and the one just discussed may be illustrated by the following example. If a customer gets an additional overdraft from his bank, the banker knows that he becomes liable for a further amount, and he has therefore to keep more gold by him; whilst the customer, by the purchases made with this credit, increases the general demand for commodities; the net result of the opposing forces being a rise in prices. This illustrates the subject disposed of in the preceding paragraphs. But, taking the case of an old-fashioned

Economies in the use of coin raise prices; but at any one time this does not influence the relationship between prices and the currency.

gentleman who never wrote a cheque for less than £5, and who paid all bills for smaller sums in coin, if at his death his property were to fall into the hands of a more modern individual, who paid almost every bill by cheque, here we have an illustration of the second variable element connected with credit. The effect, in this instance, is that the banker, as soon as he knows that the new conditions of business are permanently established, will keep less gold by him, for less will be demanded across the counter. Less gold being kept by bankers will lessen the total demand for the metal, and this will lower its value, and thus raise gold prices. This example of the slow growth of modern commercial methods illustrates an important movement in commercial evolution; for there are many other ways in which the use of gold is being economized; the increasing use of book-entries, notes, and bills being the chief methods employed. Every arrangement which increases the pace at which business is done, as, for example, telegraphic transfers, also acts in the same way; for gold is thus set free and made available for a second transaction more quickly than would be the case without such contrivances. There can be no doubt that all these reforms do tend to lessen the demand for gold, and therefore to lessen its value or to raise gold prices. But, at any one time, the economic forces controlling these matters are very rigid. Whether much or little money is drawn in cash, the banker has to keep a certain amount of gold in reserve in his safe; and the fact that the

banker of the next generation will be able to carry on business with a smaller reserve does not in the slightest degree influence the existing banker in deciding the amount of coin he now thinks it wise to keep in hand. There is nothing in this slow organic development of commercial life to give rise to any doubt as to the existence, at any one period, of a definite quantitative relationship between the amount of the standard of value in circulation and the total money value of the transactions in which the standard in question is used.

It has no doubt often been said that the economies in the use of gold may be relied on to keep up prices in future, and that the fears of bimetallists are therefore illusory. As far as the immediate point at issue is concerned—that is, as to the effect of foreign legislation on prices—this remark is certainly not to the point. This progress in commercial methods is not said to have been due to the abandonment of bimetallism on the Continent, and it would have taken place under any probable conditions. It does not, therefore, affect the comparison between prices as they are and prices as they would have been if bimetallism had been effectively maintained.

The questions connected with commercial evolution are, however, very important; for it is true that the economies in the use of gold do tend to raise prices. But it may be as well to point out here, though it is somewhat wide of the present discussion, that there are other forces at work tending in the opposite direction. Monometallists usually connect

And the effect of these economies would have been the same had bimetallism been maintained.

It should, however, be noted that there are other causes tending to lower prices;

the fall in prices with the vast increase in the facilities for the production of commodities; but they forget, as a rule, that it may also be connected with the growing tendency to complexity in business methods. In old times the raw material for the manufacture of any article may only have changed hands once; it may have passed direct from the producer of the raw material to the consumer of the finished article. But at present all commodities in the market, or parts of them, have in almost every instance passed through the hands of many firms, including those connected with their transport, during the course of their manufacture. If, for example, during any period the number of times the material changes hands is on an average doubled, then the number, or rather the volume of business transactions measured by the value of the average commodity, will be doubled also, even if there is no increase of production; and the increase in the amount of coin required on account of the increase in the number of these transactions may, at all events, outweigh the effect of the economies in the use of gold in each one of them. If prices have fallen in proportion to the increase of production, then the increase of production is not a reason for any additional gold being held in reserve; if any economy has been made in the amount of gold required as a basis for the monetary transactions connected with the production of each finished article, then it would on this account be possible to actually reduce the reserve of specie. But, as a

fact, banks have in recent years largely increased their stocks of metal,¹ and there must be some forces at work, such as those due to the increased complexity of business methods, which are not generally recognized. And we cannot count on prices being maintained by economies in the use of gold in the future, any more than they have been in the past.

It is often urged that the great increase in bank reserves, above mentioned, proves that there is no "scarcity" of gold, and the prices cannot, therefore, have been lowered by that scarcity. What is the exact meaning intended to be attached to the word "scarcity"? I do not know, but I presume the argument hints in a vague way at a denial of the existence of a quantitative relationship between the coin in circulation, including reserves, and the money value of business transactions. This point has already been discussed. But those who argue in this way fail to recognize that this accumulation of gold is kept in the banking reserves for a definite purpose; it is not lying idle there, heaped up by some fortuitous circumstance; it is not accumulated "hastily and without any pertinent reason." With regard to America, "what it means, beyond a shadow of doubt, is that the supply of gold is so abundant that the character and safety of the note circulation have been improved in a signal manner."² The desire

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¹ See Gold Standard Defence Association Papers, No. 23.

² Prof. Laughlin's words quoted in Wells's "Recent Economic Changes," p. 209, though mine is not, probably, the deduction he would draw from them.

to improve the stability of credit, after the Baring and other experiences, has been strong enough to induce bankers to retain this gold in reserve, without reference to the wants it might otherwise have satisfied ; and this tendency to increase the reserves of specie may have been one of the very causes tending to raise the value of gold, and thus to lower gold prices.

Thus there is nothing in these considerations concerning credit to shake the belief that gold prices would have been higher under a bimetallic régime.

But to return to the subject immediately in hand, the discussion in this chapter shows, I believe, that the quantitative theory of prices may be relied on, if accurately stated. It may, I think, with truth be asserted that, though there are many variable factors affecting prices, yet for a given condition of all these other variables, there is a definite quantitative relationship between the ultimate level of prices and the quantity of the standard of value in circulation ; though, possibly, the relation is not one of simple proportion. The quantitative theory, even if correctly stated, has, however, the mischievous effect of merely drawing our attention to the gold in the currency, and of thus taking it away from the equally important consideration of gold as an article of merchandise. It is most important to keep in mind that, in Lord Farrer's words, "gold is the measure of value as well as a medium of exchange, and, as all credit is expressed in terms of gold, any alteration in the *value* of gold affects proportionately the *value* of each item of the whole fabric of credit."¹ However much credit may swell or contract, a £1

¹ "What do we pay with?" Lord Farrer, p. 67.

credit instrument will be normally worth a sovereign, and the sovereign will be worth no more and no less than the value of the gold in the sovereign;¹ this will be true where a system of free and gratuitous coinage exists, for any difference between the value of the coin itself and the value of the metal in the coin will be at once corrected by metal flowing in or out of the currency. The value of the metal gold is the ultimate regulator of gold prices, and that value depends on the equation of supply and demand, the demand being the total demand for the metal for use in the currency and in the arts. If the demand for gold is lessened by that metal being partially displaced from the currencies of certain countries by the substitution of silver, then its value will be lowered. But if the value of gold is lowered, more of that metal will flow out of the currencies of countries remaining on a purely gold basis, thus, in accordance with the quantitative theory, diminishing their total volume, and raising prices. And, whether we look to the quantity of metal in circulation, or to its value as an article of merchandise, there is nothing in these considerations to shake the belief that, had bimetallism been effectively maintained on the Continent, average gold prices would now be higher in all gold monometallic countries; or, by similar reasoning, that average silver prices would now be lower in silver monometallic countries.

¹ Neglecting the small differences due to causes mentioned on p. 10.

CHAPTER XVII.

THE EFFECT ON PRODUCTION OF APPRECIATING AND
DEPRECIATING STANDARDS.

Before proceeding with the argument, the effect of alterations in the value of the standard must be considered.

THE next question for consideration is whether it would have been for the well-being of the community if the fall in prices in recent years had been less rapid ; but, in order to solve this problem, it is necessary to review the whole question of appreciating and depreciating standards of value. The word “appreciating” is not always used in the same sense. Here, an appreciating standard of value is merely intended to denote a standard in use at a time when the average price of commodities, as measured by that standard, is falling, without any regard to the causes which are producing that fall. In this chapter we shall be occupied in considering the influence of rising and falling prices on trade—on the *production* of commodities. In the next chapter, the way in which the *distribution* of commodities amongst the different classes of consumers is influenced by the variations in the value of the standard will be discussed.

In the first instance, an objection which may be urged against the line of argument followed in these two chapters should be noticed. The ultimate results of any changes in economic conditions are no doubt those to which most attention should, as a general rule, be paid; but, this is no reason for not fully considering the temporary effects of economic causes. To prove that a result will only be felt for a limited period no doubt reduces the weight which should be attached to that result in shaping our future policy; it does not in the least indicate that it should be neglected. And, in judging of the importance of any economic cause producing merely temporary results, we must consider both how frequently the cause is likely to be operative, and also how slowly its influence dies out. Far greater weight should, for example, be attached to the effects of the ordinary variations in the value of the standard, which are being perpetually felt, than to similar effects which may only be experienced on one occasion, as at the introduction of a bimetallic system. If any cause is constantly recurring, and if its effects last for a long time, then almost the same consideration should be given to it as if it produced some permanent results. Few, if any, of the effects of an appreciation or a depreciation of the standard, it is true, will be felt for all time; but as such disturbances subside very slowly, the changes in the currency which produce them have, nevertheless, it appears to me, a very considerable influence on the well-being of the community.

It is the temporary and not the ultimate effects of any such alterations which are important.

The influence of falling prices will be here discussed.

The opinion of Jevons as to the beneficial effects of the rise in prices due to the Australian gold discoveries has already been quoted; and other economic writers might be cited in the same sense. The testimony of men who actually witnessed these events is very valuable, though it is quite possible that the stimulus to trade, which they attributed to the increase in the currency, may have been in part, at all events, due to other causes. So far only a brief allusion has been made to the actual way in which such beneficial results are produced. Here, I propose to deal almost exclusively with the effects of falling prices. The arguments used, however, all apply, if reversed, to a depreciating standard, and the influence of a rise in prices is easily deducible from any conclusions arrived at with regard to the effects of falling prices.

Two lines of argument will be pursued.

Two very distinct reasons can, I think, be given for believing that an appreciation of the currency will have a tendency to put a drag on trade, and to check production.

In the first place, when prices fall, profits are diminished, less capital expenditure is incurred, and production is checked,

It is generally admitted that any cause tending to raise the value of the standard, such as an increase in the demand for the precious metals for non-monetary purposes, will lower prices, but that a long time will elapse before they will fall to their ultimate level. Such a cause will thus produce a gradual fall in prices, and, therefore, a gradual diminution in the gross income of all industrial concerns. It is also generally admitted that various items of expenditure, such as the interest on debts, taxes, salaries, wages,

freights, etc., will, at first, at all events, fall more slowly than prices. Expenditure decreasing less than income means, of course, a diminution in profits; and this result of a fall in prices is a fact so well established by experience that it hardly requires any theoretical reasoning to establish its truth. Now the owner of any industrial concern, like every other individual, is under a strong temptation to keep his personal expenditure up to its usual money level; and, in the same way, in order to meet the views of their shareholders, directors of companies are always anxious not to declare a lower dividend than usual. And it is evident that if the private expenditure of producers and the dividends of companies do not diminish sufficiently rapidly to balance the whole of the diminution in profits, then there must be some diminution in the industrial expenditure to make good the loss. Producers will in consequence probably curtail their expenditure either by not maintaining machinery or other fixed capital up to its former level of efficiency; or by ceasing to make expensive improvements in the methods of manufacture; or by turning out an inferior article; or by keeping less stock in hand; or by diminishing the expenditure connected with the distribution of goods; or by not paying off debts; or by not starting new commercial enterprises, etc., etc. As far as existing industries are concerned, there is perhaps no reason to expect, if profits are large, that there will be any great diminution in productive expenditure;

but such economies, to whatever extent they are made, must all result, sooner or later, in a diminution of production, at all events in comparison with the production which would have taken place if these economies had not been made.

and when profits turn to losses, this influence will be quickly felt.

It was assumed above that the profits made by the manufacturer are considerable. If, however, the margin of profit is so small that the diminution of gross income due to any fall in prices turns that profit into a loss, then the only alternatives for the manufacturer are either to live on his capital, or to borrow, or to economize by some of the methods mentioned in the preceding paragraph, or to suspend work more or less completely. If he either lives on his capital or borrows, he is using up capital which would probably have been employed productively in other ways. Thus, whichever alternative he selects, it must be one tending to check production.

The stimulus to inventive power will not counter-balance these influences.

It is true that in some cases the lessening of profits may stimulate the energies and inventive powers of producers in a beneficial manner; but the stimulus of the ever-present desire for an increase of wealth is so great that little can, I think, be expected from this additional incentive. The diminution of profits will, moreover, diminish the desire to embark more capital in industry; and, on the whole, there is no reason to doubt that falling prices will tend after a time either to actually diminish, or to check the rate of increase of production in all industries, and that, if the profits in

any trade are so small as to be turned into losses, these results will be quickly felt.

In reply to this argument, it may be said that a fall in prices does not diminish the wealth of the world; it only transfers it from one person to another; and, therefore, there will be no diminution in the fund available for capital expenditure. This objection must be answered, but, unfortunately, the answer is here somewhat out of place. It is no doubt strictly true that the destruction of wealth is not the primary effect of a fall in prices; it is at first a mere transfer; but is the person to whom the wealth is transferred as likely to invest it in productive works as was the person from whom it was taken? We have seen that the effect of a fall in prices is to diminish the producer's profits, and therefore to lessen the productive expenditure incurred by him. But, on the other hand, when prices are falling the purchasing power of money increases, and this is a benefit to the labourer and to all to whom fixed payments are due, either as interest on loans, or for any other reason. In fact, the wealth which the producers lose is transferred to the working classes, and to what may, perhaps, be called the creditor class, though it includes others besides creditors. One or both of these classes might, therefore, in these circumstances, be able to utilize some of this additional wealth for capital expenditure, whilst continuing to purchase the same amount of necessaries and luxuries as before; and the question is whether they are likely in this way

A fall in prices does not destroy wealth; but wealth is thus transferred to others less likely to use it productively.

to make up the deficiency in productive expenditure due to the falling off in the amount forthcoming from the producers. As to the working classes, they habitually spend the bulk of their earnings immediately ; and little of the capital not expended by the producer is likely to be replaced by the labourer. As to creditors, no doubt some additional savings will be forthcoming from that quarter ; but many of this class will, like the labourer, spend the whole of their incomes, notwithstanding the increased purchasing power of the fixed money payments they receive. Moreover, various portions of the fixed charges on industrial concerns (taxes, for example), do not go directly to individuals ; and the loss to the producer, due to the increase in the value of such payments, is not likely to result in a corresponding economy on the part of the corporate bodies receiving them. Thus, though it is true that the first result of a fall in prices is to transfer wealth from one class to another, yet that transfer will have the effect of diminishing productive expenditure, and, therefore, sooner or later, of diminishing production.

A rise in
prices
stimulates
production.

Turning to the consideration of rising prices for a moment, if the rise comes from causes primarily affecting the currency, profits will increase, and the producer will be the only person immediately benefited by the change. He will be in a position to expend more either on himself or on his business enterprise. He will no doubt do both. But his increased prosperity will probably make him more

desirous of increasing his out-put. He may supply the necessary new capital out of his additional profits, or by means of credit; and the credit will be all the more easily obtainable because of his increasing profits. Thus a rise in prices will, in this manner, certainly stimulate production. No doubt there will also be some corresponding diminution in capital expenditure; for the rise in prices will diminish the savings of the labourer and creditor classes. As to the working classes, who, as a general rule, live up to their incomes, they must perforce reduce the amount of commodities they purchase; they, in fact, must economize, and their economies are transferred to the producers. Here we are only concerned with the question of production, and whatever else may be said, it appears certain that this transfer will be accompanied by an increase of productive expenditure, and therefore, sooner or later, by an increase of production, other things remaining the same.

Returning to the question of an appreciating standard, it has been seen that a fall in prices will at first increase the purchasing power of wages and salaries; that is to say, it will increase the real wages of the great mass of the people. This will have the effect of increasing the demand for commodities, an increase which will tend to raise average prices. It has been seen, also, that, under the same conditions, there will be a decrease in production; which, according to the quantitative theory of prices, is another circumstance tending to raise

Normal conditions will no doubt obtain again after a long interval.

prices. Thus a fall in prices will be checked by itself creating forces tending to act in the opposite direction; and this is one of the reasons why an alteration in the conditions primarily affecting the standard of value may be expected only to produce a gradual fall in prices. In time the diminution of production, by throwing men out of employment, will bring down wages and salaries; and, the cost of production thus being lowered, prices will fall. New industrial concerns will also be started under the new economic conditions; all the fixed capital thus created, the buildings, machinery, etc., will be obtained at a lower price. These new ventures will, therefore, be less burdened with debt; no part of their indebtedness will be due to the fall in prices; and the profits they make will be as great, when wages have fallen to their ultimate level, other things remaining the same, as those made by the original manufacturers before the fall in prices. Thus, after a time, the normal condition of things will be reached, and the effects of the appreciation of the standard will die out. It will be said, no doubt, in order to minimize the importance of these temporary influences, that trade accommodates itself quickly to its surrounding conditions. This is true in a sense. During the process of adjustment after any change in the value of the standard, the *primary* conditions to which trade has to adjust itself are not the same as those which existed before the disturbing cause; and, considering the length of time during which some of the factors of

trade will remain in an abnormal condition, it would appear that a long period must elapse before an appreciation of the currency will have completely worked out its full effects in lowering profits, and, consequently, in producing a benumbing effect on trade.

Passing on to the second reason for believing that a fall in prices will put a check on production, it is first of all necessary to prove somewhat more fully that prices only respond slowly to any alteration in the conditions which determine the value of the standard. This is due to several causes. In the first place, when prices are falling, a certain force is required to overcome the disinclination of each manufacturer to lower his price list; the mere conservative instinct of mankind will, in this manner, prevent a fall in prices due to any change in the conditions of the standard from taking place coincidentally with that change. No doubt custom and habit will often produce very little effect, but in a minority of cases these forces may have considerable influence.¹

In the second place, prime cost tends to respond but slowly to variations in the value of the standard;

A more important effect on prices is, however, produced in the following manner. In settling price lists, the managers of going industrial concerns must chiefly take into consideration those

¹ Prices of finished articles will respond less readily to economic forces than prices of raw materials. But if, as the sequel will show, this delay will check the sale of the finished article, it will equally check the sale of the raw material. For no more raw material is sold than is required for the manufacture of the finished article.

items of expenditure which they can diminish by diminishing their production; that is to say, the prime cost of producing their goods. If, when prices are falling, the prime cost does not fall as quickly as the price of the product, then the profit on the turnover will diminish; and when the price reaches the point at which the profit on the turnover vanishes, then the manufacturer will, as a general rule, decline to lower his prices any further, because it would pay him better to lose his trade rather than to do so. Of course a desire to keep up trade-connections will often induce firms to trade at a lower price, and therefore at a loss; but, even in that case, business will be pushed with less vigour. But, on the other hand, manufacturers will often have decided, as the result of experience, on the profit on the turnover which they ought to make to cover the standing expenses of their industry; and, when that is the case, they will frequently refuse to lower their prices except in proportion to the fall in the prime cost, whatever may be the result of their policy. Thus the prime cost of goods plays an important part in settling prices. Now many of the items which make up the prime cost, and consequently the prime cost itself, will fall very slowly as a result of any change in the value of the standard; as, for example, taxation (when included in prime cost), railway charges, royalties, the price of some raw materials (*e.g.* to take an extreme case, water when supplied by a corporate body), etc., etc. The most important items included in the prime

cost are, however, wages and salaries ; the wages and salaries paid by the manufacturer himself, and those paid by the makers of the raw material he buys, and by other firms that he deals with. When prices are falling, trade will be depressed, and wages will be forced down. But the question is whether the earnings of labour will immediately, or even quickly, respond to any cause affecting the value of the standard. Of course when men are actually thrown out of employment they will, after a time, be ready to work on almost any terms ; and, then, their competition will act as a powerful lever in forcing down the level of wages. But very commonly the first effect of slack trade is merely to shorten the hours of work per week, without throwing men out of employment, and without altering the nominal rate of pay. In these circumstances, the hope of stimulating trade and of thus increasing their total earnings is not a sufficient inducement to make workmen willing to accept a lower rate of wages ; for, though it might really be sound policy for them to submit to the fall, yet they could hardly tell whether the result would not merely be to increase their master's profits. Even when trade is actually being checked by a fall in prices, it is very difficult for the working classes to be certain that the greater regularity of work accompanying a reduction of their money wages would compensate them for that reduction ; and, when trade is naturally progressing, it becomes still more difficult for them either to prove or realize this conclusion. Commonly,

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therefore, wages will not respond quickly to the effect of falling prices. And as to salaries, they are always largely regulated by custom, and custom changes but slowly. Thus, on the whole, it may be concluded that many of the items of expenditure, including salaries, which make up the prime cost of any article, will respond slowly, and wages, the main item, will not respond quickly to any change in the value of the standard. And as the prime cost plays an important part in settling prices, it is evident that average prices will not, therefore, respond quickly to any changes in the conditions of the currency.

Prices must
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diminished.

According to the quantitative theory, prices vary with the quantity of money in circulation, the smaller the quantity, the lower being prices. Now in the case of each individual manufacturer, it is obvious that if he postpones the lowering of prices unduly, he will be under-sold by others, and his sales, and consequently his production, will diminish. This will be readily admitted. And if there is a general delay on the part of all manufacturers to drop their prices in a manner corresponding with any decrease in the currency, it is equally true, though the result is not so apparent, that their action will result in a general limitation of production. If all those coming to a market to buy bring less money with them, and if all those coming to sell decline to lower their prices in proportion, it is obvious that the usual amount of business will not be done. Or, to put the matter more

generally, it has been seen that there is a certain relationship between the volume of the currency and the money value of business transactions; if, therefore, the quantity of currency in circulation diminishes without a corresponding fall in prices, then there must be a diminution in the volume of business done, other things remaining the same. It is extremely difficult to tell how effective the forces, described above, will be in delaying the lowering of prices; but, to whatever extent they do act in that manner, they must have the effect of putting an immediate check on trade.

Several objections may be raised in opposition to this view as to the influence of the standard of value on production. In the first place, it will perhaps be said that a large proportion of commercial transactions do not necessitate, even indirectly, the use of any gold whatever; and that, in such cases at all events, the scarcity of the currency can have no effect whatever in hampering trade. In many transactions gold is, undoubtedly, only used as the standard of value, and not as the medium of exchange; the exchange of commodities by simultaneous book-entries being a typical example of this method of conducting business. But the drag on trade when prices are falling is, in reality, due to the price demanded, rather than to any diminution in the volume of the currency; and the effect is the same whether the standard is or is not used as the medium of exchange. To make this point clear, let it be assumed that, in some gold-using

Trade will be hampered by an appreciating standard even if the standard is not used as a medium of exchange.

country, the manufacturers of two commodities, A and B, exchange their goods by simultaneous book-entries; but that they use wheat as the standard of value in place of gold. If equal values of A and B are exchanged, then the book-entries will exactly cancel each other; no wheat will be used in the transaction; and no liability in wheat will be created. Now when actual transactions are made by book-entries in gold-using countries, it is not denied that the goods exchanged are really equal in value to the gold contained in the number of coins at which they are priced; it is not denied, in fact, that gold is the standard of value in such cases. In the same way, in the hypothetical case under discussion, it may be assumed that the amounts of A and B thus exchanged are really equal in value to the amount of wheat at which they are nominally priced in the book-entries. For simplicity, let it be assumed that A and B are equally valuable, and that a ton of each of them is equal in value to a quarter of wheat; a "quarter" is then the price in wheat of these commodities per ton. Next, let it be assumed that there comes a bad harvest, and that wheat rises in value; prices in wheat must then tend to fall. If, however, the manufacturer of A refuses to drop his price in wheat, he is in fact continuing to demand, in exchange for every ton of A, either a quarter of wheat, or an amount of B equal in value to a quarter of wheat; but the quarter of wheat, having risen in value, is now worth more than a ton of B. Hence, by declining to lower his

price list, the manufacturer of A is in fact declaring that he will not do business unless he gets more of B in exchange for his goods than he did before; and it is easy to see that this is also true if, though lowering his price in wheat, he does not lower it at once in proportion to the rise in the value of wheat. Similar reasoning would of course show that, if the price of B is not at once dropped to this full amount, the manufacturer of that commodity is in like manner demanding more of A than he got before. And if both hold out, each for an increase in the amount of the goods made by the other, they cannot possibly come to terms, and no business will be done. In this way sales will be stopped, and this will soon put a check on production. When the amount of any commodity in the market decreases, its value rises as compared with other commodities; A and B will both begin to rise in value as compared with wheat; and, taking the case when both manufacturers obstinately refuse to make any reduction in price, this will go on (if no other makers of A and B exist) until these goods acquire their old relative value compared with wheat—their old price in wheat, which the makers continue to demand; and then of course business can go on as before. If, however, the prices of A and B in wheat are somewhat reduced by the makers, then business can be resumed at a proportionately earlier date.

If the production of wheat remained stationary, whilst improvements in machinery (or other causes) tended to increase the production of A and B, that

would also be a circumstance tending to raise the value of wheat as compared with A and B. If this assumption had been made in the foregoing argument, it could equally well have been proved that if the manufacturers of A and B did not lower their prices as measured by wheat, then the full increase of production which might normally be expected to follow such improvements in the method of manufacture would not take place. In fact, the stability of price would put a check on trade.

If gold prices do not fall in proportion to any tendency on the part of gold to rise in value, then the volume of business must diminish.

If these conclusions are true with regard to the exchange of any two articles, they must also be true with regard to all. Thus if wheat were used as the standard of value, and if average prices did not fall at once in accordance with any tendency on the part of wheat to rise in value, then sales would be checked and production would slacken (absolutely or relatively to the production which would otherwise have taken place) until a position of equilibrium was reached. And when gold is used as the standard of value, exactly the same thing must occur. No doubt a certain complication arises on account of the fact that gold is also the medium of exchange; for any general diminution of business, by lessening the demand for the currency, directly tends to raise prices; but as the decrease in the demand for currency is the effect of a decrease in the number of business transactions, that effect cannot be felt until such business has diminished; and the only result of such a rise in prices will be to bring things to a position of temporary equilibrium somewhat

more rapidly. We may, therefore, lay down the following as a general law: Any cause, which affects the standard in a manner tending to raise its value, will, if the production of commodities goes on at the same rate as before, produce a definite fall (relative or absolute) in prices; and when, *other things remaining the same*, such a cause does come into operation, either average prices must fall (relatively or absolutely) at once to that definite extent, or sales must be stopped, and production checked, until the equation of demand and supply is again adjusted. But it has been seen that average prices will not respond quickly to causes primarily affecting the standard; and, if this is so, the other alternative—a diminution in production—would appear to be the inevitable result of falling prices. Of course it is not possible to perceive that at one moment sales are stopped, and that at another moment they begin again; the only symptom observable will be that drag on trade which producers always associate with falling prices.

In stating our conclusion as to the general result of falling prices, it was assumed that all other things remain the same. This is a legitimate assumption in studying the effect of any particular cause, provided that, under cover of these words, none of the effects of the cause under examination are omitted from consideration. And, in this instance, it is true that a fall in prices will have other influences which cannot altogether be neglected. When, in a primitive country, prices are falling and

This check on production may, perhaps, be mitigated in certain ways.

profits consequently diminishing, those who have hoarded money will be induced to discharge some of their liabilities with coins taken from their hoards. This will increase the currency, and the tendency to rising prices, thus produced, will help to restore things to a position of temporary equilibrium. In fact, if a sufficient quantity of coin were thus added to the circulation, even though prices did not fall as quickly as the other causes affecting the value of the standard appeared to demand, yet production might go on unchecked. But this influence will not be a powerful one; for, in uncivilized countries, this supply of coin will quickly dry up; and, in civilized countries, falling prices will have little tendency to induce bankers to lessen their reserves. Another influence of a similar character is due to the effect of custom on credit. If, when prices are falling, the same amount of *money* as usual is lent to a customer, this will in reality be an increase in the amount of *real* credit; and such an increase of credit will help to check the fall in prices. But the depressing effects of an appreciating standard will, on the other hand, tend to contract credit; and little or no easement is likely to be felt as the net result of these opposing influences. Thus neither of these methods, by which a fall in prices might be prevented, as it were, from checking production, are likely to have any very material influence.

This result may, perhaps, be com-

It may also, perhaps, be urged, in reply to these arguments, that what is really suggested is that producers will try to check any natural fall in

prices by limiting their output; that this would amount to an endeavour to form a gigantic trade combination; and that such attempts never succeed for long. Such a comparison is rather far-fetched. But it is true that the effect of falling prices is somewhat similar to that which would be produced by a universal combination; the union would, however, be an unconscious one, having no acknowledged object, the lessening of output not being recognized by its members as being the result of their combined action. Ordinary combinations usually break down because a few firms either desert, or refuse to join the union, in the hope of greatly increasing their business by underselling those in the "trust"; and they will be able to carry out their design if the combination has actually succeeded in raising prices above their normal level. But, with the unpremeditated union produced by falling prices, there will at first be no such temptation; because we may assume that prices are constantly being lowered by the ordinary forces of competition in proportion, or nearly so, to the fall in the prime cost of manufacture. Of course if any one manufacturer could break the bonds which force all producers to act alike—if he could at once lower wages, salaries, royalties, taxes, freights, etc., to their normal level—then, no doubt, such action would not only be extremely profitable to him, but it would also help to bring down the level of prices, and would thus hasten the return to the original scale of production. But manufacturers

pared to a combination to limit output.

generally will be powerless to do this, and so long as that is the case, prices will remain above and production will remain below their normal levels.

Rising
prices
stimulate
production;
but this
does not
justify
inflation.

If the foregoing arguments are reversed, they prove that rising prices stimulate trade and production. But, it may be said, an inconvertible paper currency, continually being depreciated by fresh issues of notes, affords a ready means of continuously raising prices, and therefore of obtaining these benefits; and as no one whose opinion is worth regarding, could now be found to advocate such a system, this is equivalent to a general denial of the beneficial effects of rising prices. The evils resulting from an inflation of the currency are, however, due to the way in which any such action on the part of a government would destroy confidence in commercial continuity, and possibly in commercial honesty. If confidence had previously been destroyed, then perhaps the beneficial effect of such inflation might be apparent; because the evil effects, not being produced, would not hide them. In this connection it may be interesting to note the opinions of Arthur Young, who closely watched the influence of the depreciation of the assignats in revolutionary France at the end of the eighteenth century, during a period of the greatest social disorder. He writes that "the very circumstances which, according to common ideas, should have continued" the depression of manufactures "has most unaccountably revived them in some measure; I mean the depreciation of the assignats."

The explanation he gives is not very clear, but presumably he intends to indicate that the price of labour became so low that master manufacturers could "sell the product of that labour to such an advantage as to create demand enough to animate their business."¹ Another objection to the use of inconvertible notes lies in the fact that, if a metallic currency is ever to be resumed after such periods of inflation, the only alternatives are either a general act of repudiation, or a gradual restoration of the standard to its old value, when all the evils attributed to an appreciating standard will be felt to the full. The initial benefits arising from artificial inflation will be dearly bought by the subsequent troubles; and to assert that there may be initial benefits in no way justifies any such systems of inflation.

Lastly, as a reason for distrusting all the arguments tending to prove that a fall in prices checks production, it will no doubt be said that facts are against this conclusion; for it cannot be denied that, though during the last twenty-five years there has been a continuous fall in the average price of wholesale goods in England, this state of things has been accompanied by a great increase of production. But there is no evidence to show that production would not have increased still more rapidly if prices had remained steady. It is possible to conceive that some independent cause,

The history of prices in recent years helps us little.

¹ Youngs' "Travels in France," edited by Betham Edwards, p. 346.

such as a great increase in the supply of gold, might have come into operation at the time the fall in prices commenced, and that prices might thus have been maintained at a higher level; and, had such been the case, recent events do not prove that the increase in the production of commodities would not in those circumstances have been even greater than it has been. In fact, if causes primarily affecting the currency have tended to produce a fall in prices, it is impossible to prove that commerce would not have been even more active if no such causes had existed. The experiences gained in recent years helps us but little in solving this problem.

Recapitulation.

Thus there are two reasons for believing that a fall in prices will tend to diminish production. To put the matter in a somewhat paradoxical form, when the standard is appreciating, on the one hand, prices will be too low for the usual profits to be made, or for the usual productive expenditure to be incurred; and, on the other hand, prices will not be low enough for the original amount of business to be transacted. Exactly the opposite effects will be produced with rising prices. Profits, and consequently productive expenditure will increase. And, looking at the commerce of the world as barter, it will be as if all manufacturers entered the market ready to part with goods for less of their neighbour's products than they received before; commerce will be readily transacted; business will increase; and the increase of production

will go on till a new position of equilibrium is reached.

If a general diminution in production takes place, it is evident that there will be fewer commodities to distribute amongst the various classes of the community. In these circumstances some, and probably all, must receive less of the necessities or luxuries of life; and such an event is, therefore, the greatest economic misfortune that can happen to a country. The foregoing arguments, therefore, all tend to show that the community will be made more prosperous by a rise in prices, because production will thus be stimulated. But, on the other hand, it is now generally admitted that, up to a point probably in many instances not yet reached, the higher the wages of labour the more productive it becomes; and here, therefore, is an argument in favour of falling prices, even if the question is regarded solely from the point of view of production; for falling prices will, at first at all events, increase the real wages of the labourer by increasing the purchasing power of his earnings. How much force should be attached to this argument is, however, doubtful. After a fall in prices, the factors of production all in time return to their normal condition, and no ultimate effect would be produced on real wages by such a cause; production cannot, therefore, *ultimately* be stimulated in this manner. But in all probability the increased productivity of labour is an effect which is only attained after a higher rate of real wages has continued for a long

These conclusions are in favour of rising prices; but the question of distribution has yet to be discussed.

time ; for, at first, the increased value of earnings is apt to be wastefully dissipated ; and it is only gradually that the labourer learns to use his increased wealth in a manner likely to make himself or his children more efficient in the production of wealth. If, however, production would in truth be comparatively quickly stimulated by the increased prosperity of the working classes, what we have to inquire is whether that result would in reality be produced by a fall in prices. This opens up the whole question of the distribution of commodities amongst the various classes of the community ; a subject as important as that of production in balancing the advantages and disadvantages of appreciating and depreciating standards.

CHAPTER XVIII.

THE EFFECT ON DISTRIBUTION OF APPRECIATING
AND DEPRECIATING STANDARDS.

IN discussing the distribution of commodities amongst the different classes of society, we shall again mainly be dealing with the temporary effects of variations in the value of the standard. We are not, in fact, concerned with normal distribution, a subject fully dealt with in many treatises on economics. Nor will it be necessary again to revert to the way in which the variations from the normal, due to monetary causes, gradually die out, or to the rapidity with which such influences may be expected to subside; for that subject was considered in the preceding chapter, where it was seen that these effects may be appreciably felt for a very long time.

In the short space here available, only the broadest views of this subject can be given. Probably the easiest way to consider this problem is to imagine a hypothetical manufactory, which may be taken as typical of the industry of the world, and to see how an appreciation or a depreciation of the currency will affect the different parties interested.

Monetary changes produce no great permanent effects on distribution.

The distribution of the receipts of a typical manufactory between wage-earners, producers, and re-

ceivers
of fixed
payments
will now be
studied.

The recipients of the benefits arising from this typical industry may be divided into three large groups.

(1) The wage-earners; including all those who make their living by their own exertions, and who receive wages, salaries, or other payments.

(2) The producers; or the parties to whom the profits made at the typical manufactory accrue. This group includes the ordinary shareholder; and also the farmer, agriculture being included amongst the industries which the manufactory is supposed to typify.

(3) The receivers of fixed payments; including creditors receiving interest on loans, debenture-holders, landlords receiving rents on land and buildings, mortgagees, pensioners with a legal claim for their pensions, etc. Taxes must also be included in the fixed payments.

These groups really merge one into the other, so that the precise boundary is often difficult to define; for example, a landlord, granting short leases, should rather be classed as a producer, if he regularly appropriates to himself any additional profit made by his tenants in good seasons by temporarily raising their rents. Moreover, the same individual may belong to two or three of these groups. But the general idea of distribution, which can be obtained by studying the way in which the receipts of our typical manufactory are shared between the wage-earner, the producer, and the receiver of fixed payments, is sufficiently accurate for our purposes.

The following table has been prepared to facilitate the discussion of this question of distribution. In the first column (A) are given the gross receipts and the total output of commodities produced by the hypothetical manufactory, together with the way in which the receipts are distributed amongst the different classes. The amount of the commodity thus produced, which could be bought by each of the parties with their receipts is also given; and, as the manufactory is typical of all industry, the share of the total output of commodities thus, as it were, allotted to each class represents the amount of the average commodity they could purchase with their receipts; that is to say, the real value either of their wages, or of their profits, or of the interest received, as the case may be. Other columns are given to show how the money and the real receipts vary from this initial distribution when different changes in the condition of the currency take place. It has been seen in the preceding chapter that wages will not at once respond to any change in monetary conditions; and to illustrate the first effect of such monetary changes, the money paid in wages is shown in the table as remaining constant, unless the gross receipts are insufficient to pay the full amount, or unless it is otherwise stated. It will be observed, also, that nothing is included in the outgoings for the purchase either of raw materials or of other manufactured goods. But, as the expenditure incurred in making all goods may be divided in the same way, there is no objection to

The effect of variations in the value of the standard is illustrated by the following table.

TABLE ILLUSTRATING THE DISTRIBUTION OF THE GROSS RECEIPTS OF A HYPOTHETICAL COMMERCIAL CONCERN, AND GIVING THE MONEY VALUES AND REAL VALUES (ESTIMATED IN COMMODITIES) OF THE PAYMENTS MADE TO THE VARIOUS PARTIES INTERESTED.

Classes amongst whom the receipts are distributed.	Assumed initial stage, with which other columns should be compared.	System of currency resulting in—								Column G.	Column H.
		Reduced prices; or an appreciation of the standard.	Increased prices; or a depreciation of the standard.		Increased prices, creased prices.	Constant prices (commodity stand-ard).	Con-stant price of output per man (labour stand-ard).	Reduced prices.			
			Before rise in wages.	After rise in wages.							
Distribution of receipts. {Gross receipts {Output of commodities {Fixed charges (interest on loans; rent; taxes, etc.)—The Creditor Class Ditto. Value in commodities Wages and salaries—The Working Classes Ditto. Value in commodities Profits to producer (owner of manu- factory, ordinary shareholder, farmer, etc.) Ditto. Value in commodities	A	B	C	D	E	F	G	H	I	K	
											Reference

Figures opposite "fixed charges" represent royalty on output. Otherwise the conditions are the same as in—

Increased production.

Constant production.

(Gross receipts
(Output of commodities
(Fixed charges (interest on loans;
rent; taxes, etc.)—The Creditor
Class
Ditto. Value in commodities
Wages and salaries—The Working
Classes
Ditto. Value in commodities
Profits to producer (owner of manu-
factory, ordinary shareholder,
farmer, etc.)
Ditto. Value in commodities

taking^g as our hypothetical industry one in which every stage of the manufacture of the finished article is undertaken, including the production of the raw materials.

It should, however, be most distinctly understood that this table is merely for the purpose of illustrating the following arguments; it is not intended to represent facts. Industries differ immensely one from the other in all these conditions; and it would be impossible to give with any approach to accuracy any figures representing the average of all industries.

In order to facilitate the discussion it will, in the first instance, be assumed that the typical industry is not subject to any charges, like royalties, which are obligatory, but which increase proportionately to the output. The effect of such charges will be considered separately.

In discussing the question of distribution it will be necessary to consider the case of commerce, both when it is progressing, and also when it is in a stagnant condition. Taking the latter case first—that is to say, when the production of commodities is neither increasing nor decreasing—let us consider the effects produced by the adoption of a hypothetical standard of value which so adjusts itself that the price of commodities keeps rising; or, in other words, the effect of a depreciation of the standard. In these circumstances it will be seen (by comparing columns A and D) that the receivers of fixed payments are certain to suffer; for they, no doubt, would find their incomes of less value

Certain hypothetical conditions being assumed in times of stagnant trade, a depreciation of the standard appears undesirable;

to them on account of the increase in prices ; and, if this be the intentional result of any monetary reform, no equitable consideration can be advanced to justify the suffering thus imposed on creditors and landlords, unless indeed they were aware that the standard would depreciate when they lent their money or fixed their rent. This class will, in fact, get a smaller share of the output, and what they lose will be divided between the wage-earner and the producer, between whom there will be a struggle for the lion's share of the spoils. Whilst it is, no doubt, possible that wages might be forced up so much that the workman would be benefited in spite of the increase in prices (column E), it is certain that the wage-earner, if not belonging to a powerful Trades' Union capable of safeguarding his interests, would not have his wages raised to that extent for a long time, and that he would during the interval suffer from the greater cost of the necessaries of life ; and government employees, and those who gain their living in employments not directly connected with industry, might be even in a worse position, because of the greater difficulty of obtaining an increase in their wages or salaries. The producer's money profits would certainly increase, because the rise in prices would make the gross receipts increase without any corresponding increase in the fixed payments for loans, rent, etc. ; and the real value of his receipts would increase because the produce of the sales of a smaller proportion of his total output would suffice to meet the

fixed payments. In arriving at any general conclusions, it is, of course, necessary to consider the question of production as well as the question of distribution; and in the last chapter it was shown that an increase of profits stimulates productive expenditure, and that a depreciation of the standard facilitates business by rendering transactions more easily negotiable. Thus, on the adoption of such a system of currency, on the one hand, the producer would almost certainly gain; production would be stimulated as a result of his increased profits; and this would tend to revive trade from its stagnant condition, to the benefit of all classes. But, on the other hand, the receiver of fixed charges would be injured; the least protected class of labourer would certainly suffer; and social discord would arise in consequence of the repeated agitations to force up wages, which would be necessary to prevent actual loss to all classes of workmen. These are the relative advantages and disadvantages of a change from a steady to a depreciating standard. The evils of trade disturbances are so great, and the immediate sufferings to the working classes from a rise of prices are so evident, that the problematical advantages of a rise in prices hardly, perhaps, warrant the advocacy of a depreciating standard, unless indeed further reason for believing that it would be advantageous to the community are forthcoming. Thus far, therefore, it would appear that it would be undesirable to change from a steady standard to one which is depreciating.

and an appreciation of the standard appears to be very objectionable.

The next case to be considered is that of a fall in the prices—that is, an appreciation of the standard—whilst trade is stagnant. (Columns B and C.) On the adoption of such a standard the receivers of fixed charges would be benefited, because they would be able to purchase more commodities at their reduced price; they would, in fact, as prices decline, receive a continually increasing proportion of the output of commodities, and this would cause a continually increasing loss to be shared between the producer and the wage-earner; a state of things which would be inequitable if the intentional result of any monetary reform, and which would, in any case, be undesirable. The producer, who would be the first to feel the loss on account of the impossibility of an immediate reduction of wages, would find his profits gradually decreasing until, perhaps, they vanished altogether. This would probably cause the condition of trade to turn from one of stagnation into one of actual retrogression, because of the consequent diminution of capital expenditure, and because of that drag on the trade due to falling prices, which was described in the preceding chapter. The workman, as long as his earnings kept up, would be benefited by the fall in prices; but, unless profits were abnormally high, this could not last long, for the depression in trade would soon make a reduction in wages possible, and indeed inevitable. In the first instance (column B), this reduction in wages might not annul the whole benefit to the labourer of the fall in prices, but

the change would probably be resisted exactly as bitterly as if there were no compensating circumstances in the case. But (column C), as the fall in prices proceeded, a still greater proportion of gross profits would go into the pockets of the receiver of fixed charges, and the necessary reduction in wages would cause actual loss and suffering to the wage-earner. The workman under government or in kindred employments would, like the commercial workman, benefit at first; but, especially in these days when the vote has so much value, his wages would not fall as quickly as those of the ordinary workman; taxes and customary fees would not fall in proper proportion, and the government labourer would gain at the expense of all other classes. It can hardly be doubted, therefore, that under such circumstances an appreciation of the standard is a most serious evil.

The introduction either of a standard with an inherent tendency to appreciate, or of one with a tendency to depreciate, would thus far appear to be undesirable; but a comparison of the results in the two cases makes it clear that the evils due to a fall in prices are far greater than the harmful effects resulting from a rise in prices. If we desire to estimate truly the effect of any variations in the value of the standard on the different classes of the community, we must consider the distribution of commodities, and not the distribution of money. Rising prices at first force the working classes (and to a lesser extent the creditor and rent-receiving

Thus far stability of prices appears best. But appreciation is a far greater evil than depreciation.

classes) to economize in the consumption of commodities; and they suffer proportionately. Their savings are transferred to the producers, who are consequently enabled to spend more on themselves and more on productive works. The effect of the additional fixed capital thus accumulated will be felt for a very long time; and it is probable that the increase in the total output of commodities thus produced will come to be distributed in the normal proportions between the different classes, before this beneficial influence is exhausted; in which case, if there is no reaction, all may find themselves benefited by the depreciation of the standard. On the other hand, a fall in prices transfers wealth from the producers to the labouring and creditor classes; and this will on the whole have the effect of diminishing productive, and of increasing non-productive expenditure; the result possibly being that the demand for labour, and consequently the wages of labour, will at first show little tendency to diminish, and the labourer may for a time get the full benefit of the change. But the fall in prices will place a certain drag on trade; and the diminution of productive expenditure must tell in the long run. In time, therefore, there will be a diminution of real wages, thus putting an end to the immediate and possibly short-lived advantages to the working classes of an appreciation of the standard. In fact, falling prices induce the producer to economize in a way which is often harmful to trade; whereas rising prices force the

wage-earner and the creditor to economize with results which are possibly beneficial for a long period afterwards. In both cases there will be suffering; both thus far appear to be undesirable; but, on the whole, I cannot doubt that the effects of appreciation are far more harmful than the effects of depreciation.

In considering the case of progressive trade, when the output of commodities keeps increasing, the question becomes more complicated. Let us first imagine a hypothetical standard of value which, in such circumstances, so adjusts itself that the price of the output per man per hour remains constant; that is to say, if the same number of men continue to be employed for the same length of time at our typical manufactory, prices will fall in proportion to any increase in production due to new inventions or to other causes; and the total money receipts will remain constant. (Compare columns A and H.) With this *labour standard*,¹ as it may conveniently be called, the wage-earner will automatically receive his share of the increase in the output, because, owing to the fall in prices, his wages will purchase more commodities; the producer will benefit in the same way, as his money profits will also be more valuable; and so will the receiver of fixed payments; and a little consideration will show that these three classes will share in exactly the same

The effects of a standard giving, when trade is progressing, a constant price to the output of labour (here called the labour standard);

¹ This term does not imply that the money-wages of labour remain constant, though it is so shown in the table. A standard always producing that result might be called a *wages standard*.

proportion in the advantages arising from the increased production. It is also to be noted that, with the labour standard, the workmen employed by governing bodies and employees in situations unaffected by trade prosperity—a not inconsiderable proportion of the working world—would get, by the fall in prices, their due share in the benefits arising from any advance in civilization, and this without it being necessary to increase taxation, or to raise customary fees and charges. It must, however, be remembered that under these conditions prices will fall continuously, and that an appreciating standard always puts a certain drag on trade, because prices will not immediately respond to the fall in the prime cost of manufacture. The volume of business will thus tend to be less than it would be if prices were stationary.

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standard
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Next (comparing columns A and G), let us imagine a second hypothetical system of currency which, other things remaining unaltered, would prevent any variation in the average price of commodities, notwithstanding any increased activity of trade; a standard which may, consequently, be called the *commodity standard*. However great the progress of industry might be, in these circumstances, the wage-earner would neither lose nor gain immediately as a result of that progress, because his wages would purchase the same amount of commodities as before. For the same reason, the income of the receivers of fixed payments would remain constant or invariable in real as well as in

money value; and they would never share with the others in the benefits arising from the increase in productive power. The whole gain from the increased production would, at first, go into the pockets of the producers. With an increased output at a constant price (column G), the gross receipts would increase; the fixed charges would absorb a smaller proportion of the whole expenditure; and the increase in profits thus produced, by increasing productive expenditure, would have the effect of stimulating trade. As to the working classes, after a time a rise in wages would certainly follow the increased activity of trade, and in the end they might very possibly find themselves materially better off under this, the commodity standard, than under the labour standard. But, on the other hand, the demands for increased wages would often be accompanied by trade disturbances; and, as to government labourers and all workers not directly dependent on commerce, they would have far greater difficulty in obtaining their just share of the good things of the world, and would in all probability be for a long time in a worse position than if prices were falling.

In comparing the relative merits of the labour and the commodity standards, as estimated in this manner, it appears, therefore, that there is something to be said in favour of each. Looking merely to the question of distribution, the labour standard, or that in which prices fall proportionately to the increase of production, would appear to be the best; and, thus far, it would appear that a standard occupying an intermediate position between the labour

and the
commodity
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because the benefits of progress would be more evenly distributed amongst all classes of workers, and because there would be no necessity for social discord arising from agitations for increased pay and wages; though it certainly has the demerit that the receivers of fixed payments—including the idle partners—would often share in the benefits of progress solely due to the exertions of others. But if the question is considered with reference to production, this opinion will probably be reversed; for, when trade is progressing, the fall in prices, which must occur with the labour standard, will tend to hamper trade; whereas, with the commodity standard, or that in which the average price of commodities remains constant, profits will increase; and this will tend to increase productive expenditure; a consideration in favour of constant, if not of rising prices at all times. To fairly balance these contradictory arguments would be an almost impossible task, and a compromise naturally suggests itself; that is to say, a standard occupying an intermediate position between the labour standard (column H) and the commodity standard (column G) would appear on the whole to be the best.

The question of abstract justice between debtor and creditor has been much discussed in connection with this subject. It has been debated whether the creditor, when he lent his money, expected to be paid back in money which would purchase the same quantity of commodities as the money he lent, or in money which would purchase the output of the

same amount of labour. But, in truth, the question never entered his head in anything like that form, and all that justice requires is that we should not make unnecessary and arbitrary alterations in contracts, especially if such alterations are intended for the benefit of one party at the expense of the other. As to future contracts, entered into after any change in the monetary system, the question of justice would hardly arise; because the creditor would know the conditions under which he lent his money. With any metallic standard, however, the future must be so uncertain, that such discussions become almost purely academical.

Of course the standard may be one tending to make the prices move outside the limits indicated by the labour and the commodity standards; it may tend to make the price of commodities rise, or it may tend to make prices fall so much that the price of the total output falls also. Both these cases have to be considered. Taking the case of a rise in prices first, if production increases at the same time that prices rise (column F), it will be seen that similar effects will follow to those described as resulting from a depreciation of the standard in times of stagnant trade (column D), only, if the result of a deliberate policy, they will be still more inequitable; for the wage-earner would have to struggle both to prevent being injured by the rise in prices and in order to get his fair share of the benefits arising from the increase in productive power; whilst the producers would get the

The standard should not be one making prices move outside these two limits.

full benefit of both movements as long as wages were stationary. On the other hand, if we consider the case (columns I and K), when, during times of increasing activity of trade, prices fall so much that the price of output per man actually diminishes, we shall find that the results would be almost identical with those described as resulting from an appreciation of the standard during times of stagnation (columns B and C); the receiver of fixed charges would gain immensely; the producer would find his profits vanishing; trade would be checked; and if the fixed charges were sufficiently heavy, the labourer would suffer, though not so quickly as if output were not increasing. Thus far it has been seen that, in times of progressive trade, the labour standard (column H) is the best from the point of view of distribution, whilst the commodity standard (column G) has certain advantages, and is preferable from the point of view of production; and we now see that undesirable results will arise if the standard varies beyond these limits, the evils arising from the price of the total output falling being far greater than those resulting from the price of commodities rising.

Thus far the standard has been discussed with reference to a condition of society capable of being represented by a single typical manufactory. No change was supposed to take place in the conditions of trade, unless specially mentioned. It remains now briefly to inquire in what manner our conclusions are likely to be influenced by the many

circumstances omitted from such hypothetical discussions.

In considering these theoretical questions with regard to the currency, the effect of other causes influencing prices, besides those primarily affecting the standard, must not be forgotten. For even if it were possible in times of progressive trade to adopt a system of currency which would make the *average* price of the output of commodities per man per hour remain constant—that is, to adopt the labour standard—yet these other variants would be certain to cause prices to fall below that limit in many industries; and, in such cases, profits and, consequently, productive expenditure would tend to diminish. If, on the other hand, it were possible to adopt the commodity standard, thus preventing average prices from varying, these other circumstances would certainly cause a rise of prices in many industries, thus producing locally the results due to a depreciating standard, which have thus far been held to be undesirable. These considerations also point to the selection of a standard occupying an intermediate position between these two extremes; for then particular industries would be less likely to feel the undesirable effect of either a rise or too great a fall in prices. But the evils of prices falling below the one limit have been seen to be greater than those due to a rise of price above the other limit; and the more nearly the standard approaches the commodity standard, the fewer will be the number of cases in which individual

The existence of other causes of instability makes it desirable that the price of the total output should rise.

industries will feel the greater evils due to a fall in the price of the total output. The commodity standard should, therefore, be that most nearly approached. In the case of stagnant trade similar reasoning would indicate the desirability of adopting a standard producing on the average a slight rise in prices, so as to mitigate the evils due to falling prices in industries injuriously affected by other causes.

The
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So far we have omitted all consideration of the many extraneous charges on industry which increase with an increase of output under all conditions of currency, but over which the producer has no control. Mining royalties are typical of this kind of burden on industry; railway charges, being seldom changed, also, as a rule, increase proportionately to the amount of business done, independently of any movement in the general level of prices; and many other examples might be given. Now, as to this class of recipients, of whom we may take the royalty holder as the typical example, it is evident that they will find their money receipts increasing with every increase of production under all conditions of currency. With the commodity standard, prices being constant, they will, therefore, be in a position to purchase more and more commodities; and the amount (but not the percentage) of the output allotted to them will increase (columns A, G, and L). In the same circumstances, the producer will also find his profits increasing, because wages and fixed charges will not rise at once in proportion to the

increase of trade. These two classes, the producer and the royalty holder, will at first share between them the whole benefits of the increase in productive power. This is no doubt objectionable; but after a rise in wages, consequent on the prosperity of trade, a fairly equitable distribution of wealth might be obtained, even if the whole of the extraneous charges were of the nature of royalties, provided they were not excessive. On the other hand, with the labour standard, it is evident that an increase of trade will enormously increase the value of the receipts of railway companies and royalty owners; for their gain will be due both to the increase in the output, bringing with it an increased royalty, and also to the increased purchasing power of the currency in which the royalty is paid. (Compare columns A, H, and M.) With the labour standard we assume that prices will fall so much that the gross receipts will remain constant, notwithstanding the increase in trade; we may also assume that for a time wages and fixed charges will remain unchanged; and we may therefore conclude that, in the first instance, the difference between these two amounts will be constant also; that is to say, that there will be a constant amount of money to be shared between the producer and the royalty owner. But, as with every increase of productive power, the royalty owner will receive a larger payment in money, it follows that in the same circumstances the money profits of the producer must get less and less; and it is not difficult to see that if the royalty

charges were heavy, his real profits would diminish in the same way. The conditions of trade cannot be healthy if those managing industrial concerns are placed in such a position that any increase of production will be an injury to them; and, as with the labour standard this will be the case with all trades subject to charges of the nature of royalties, this consideration indicates that it is very undesirable, from this point of view, that prices should fall to that level.

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In the foregoing discussion it has been tacitly assumed that no additions to the fixed charges are ever made. This is certainly an erroneous assumption if the commercial concern under discussion is to be taken as typical of industry generally. The increase of the burden of taxation is a fact too familiar to us all; and new capital is always being invested, the part which takes any form involving the payment of a fixed interest constituting a definite addition to the weight of indebtedness pressing on industry. These new burdens have to be met, and if the old burdens are not cancelled sufficiently rapidly, and if the money receipts remain constant, the net increase in the fixed charges must come out of the pockets of the producer or of the employee, one or both. Almost every one admits the advantages of keeping down national and municipal indebtedness by constantly paying off a portion of the debt; and the arguments in favour of a diminution of indebtedness are equally strong in the case of industry. This will, probably, be readily

admitted if a comparison is made between the commercial condition of two industrial companies; the total capital in the two cases being the same, but one having a large debenture debt or mortgage, and the other having none. For, the less the debenture debt, the stronger will be the position of a company to meet difficulties in times of commercial depression; and if at such times it becomes necessary to reduce dividends, the larger the ordinary capital the smaller need that reduction be; the hardship of bad times will, in fact, be less severely felt if there are no debenture-holders, because it will be spread over a wider area. But a stronger objection to fixed indebtedness is to be found in the fact that it is only by allowing profits to fluctuate that a tolerably even rate of wages can be maintained; heavy fixed charges, by diminishing the possible range of such fluctuations in profits, must consequently increase the fluctuations in wages. No doubt the decay of old firms, and the establishment of new ones, has the effect of constantly wiping out these burdens. But this is an objectionable way of obtaining the desired result, and it is natural to inquire whether no better method is available. Debts no doubt could be reduced by the introduction of a system of currency producing constantly rising prices; but there are many strong objections to any steps being taken with that definite object, and such a system would be but a rough and crude way of producing a better distribution of wealth. It is, nevertheless, true that if the price of the

total output of the industries of the world does not rise, there will without doubt either be a constant cancelling of old debts through bankruptcies, etc., or a perpetual increase of the burden on industry. And this consideration does show that some benefits will be experienced if prices rise when trade is stagnant, or if prices do not fall so much during times of progressive trade that the price of the total output remains constant.

Trade
revives
more
readily if
prices are
rising.

The commerce of all countries goes through periods of depression, and careful attention should be given to the causes which tend, at such times, to produce a revival of trade. When commerce is active, workmen are working full time, and there is a large production of commodities; these commodities are exchanged one for the other, and are then distributed for use and consumption. In times of depression there are many idle days for the labourers in the industries affected, and there are fewer commodities manufactured and available for distribution. Why cannot this state of depression be converted into a state of activity by a simultaneous decision on the part of the managers of all industrial concerns to work more regularly? Each industry would then produce the additional commodities necessary to exchange with the increased productions of other manufactories. Of course such concerted action is practically impossible, but putting the question in this way may make it easier to appreciate the stumbling-blocks which stand in the way of a commercial revival. In the

first place, though it is true that the increased activity of one branch of trade always causes an increased demand for the output of other trades, yet each manufacturer must feel confident that this increased demand, due to the increased activity of other firms, is really about to be felt before he himself will increase his own output. Confidence is above all things necessary, and rising prices, from whatever causes they may be due, do help to create a feeling of confidence. Not only must there be confidence, but there must be the capacity to meet the increased expenditure for labour, etc., during the process of the manufacture of the additional goods, and for the new machinery, etc., which may be necessary to render the increase in production possible. Now we have seen that a rise in prices will have the effect of increasing capital expenditure; and it follows, therefore, that a depreciation of the currency will render a revival of trade more probable. Changes in the value of the currency cannot, it is true, either increase or decrease the total wealth of the world; all that can be done in this way is to alter the distribution of wealth; but this redistribution may be done in different ways, some more and some less likely to produce beneficial results. A rise in prices from causes primarily affecting the currency would, in the first instance, transfer wealth from the workman to the producer; but the injury that the workman would thus suffer might be a step towards better things in the future. These considerations taken alone point to the

desirability of establishing a monetary system which in times of progressive trade would not allow prices to fall so rapidly as to cause a diminution in gross receipts, or one which in times of stagnant trade would produce a steady rise in prices. That is to say, the standard should under all circumstances be one tending to cause an increase rather than a decrease in profits; for then it will be more likely that improvements will be adopted tending to increase the efficiency of labour; an increase on which the progress of the working classes ultimately depends. But neither the possibility of a period of reaction, nor the immediate harmful effects of a rise in prices, especially on unorganized labour, must be lost sight of for a moment. The depreciation of the standard cannot be beneficial unless it is so slow and steady that a rise in wages follows close on the heels of a rise in prices.

Thus far the discussion has not dealt with the final equilibrium produced by different standards of value.

In reply to the arguments contained in this, and in the preceding chapter, it may be urged that we have not been considering the effects of a continually appreciating or of a continually depreciating currency, but rather the results to be anticipated from a change from a condition of constant prices to one of either falling or rising prices. This is no doubt true in a great measure. In considering the hypothetical manufactory, it was tacitly assumed that the initial condition of things, which served as a basis of comparison (column A), represented a position of economic equilibrium; and a comparison with the other columns, therefore, served to indicate

only the changes in distribution which would be *the first* to be felt as the result of any changes in the conditions primarily affecting the standard of value, and not the final equilibrium which would be reached when all the slower movements had fully worked themselves out. But, as the subject under discussion is the effect of the introduction of a bimetallic system, what we want to ascertain is the effect of the *change* from one system of currency to another, rather than the ultimate position of equilibrium which will be assumed after a very long time. And the foregoing conclusions may, therefore, be accepted as far as the discussion in hand is concerned.

It has, however, been urged that a bimetallic currency is less likely than one on a monometallic basis to have a permanent tendency to appreciate. As little weight should, I think, be attached to this plea, I do not propose to discuss at any length the relative merits of permanently appreciating and permanently depreciating currencies. But, as some of the arguments in Chapter VII. were based on such considerations as these, a few words on this subject may be necessary.

In considering the effect of an appreciation of the standard, it was seen that the proportion of the gross receipts absorbed in the discharge of fixed payments would be increased by a fall in prices (columns A, I, and K). But it is evident that this change could not go on for ever; for, if it did so, the whole of the gross receipts would in time go

into the pockets of the creditor class, leaving nothing wherewith to pay the wages. A permanently depreciating currency cannot, therefore, be accompanied by a perpetual increase in the real value of the fixed payments. It is true that as long as production remains unaffected by the fall in prices, and as long as the fixed charges remain constant in money value, so long must a fall in prices be accompanied by an increase in the proportion of the gross receipts required to satisfy the fixed charges. And this is where the foregoing table is misleading; for it indicates that production, fixed charges, and wages (in many instances) would remain constant, which would, of course, not be the case. If a change were to take place in some of the conditions primarily affecting the standard of value (as, for example, an increase in the use of the precious metals in the arts) then it is evident that a new force would be brought into existence which would tend to produce a fall in prices. But this new force would call into existence other forces tending to readjust the equilibrium in many ways. Profits would diminish. Production would consequently be checked. The diminution in the output would tend both to check the fall in prices and to bring down wages. The diminution in profits would tend to produce a fall in the rate of interest; and the indebtedness on industry would also tend to decrease in money value, because capital of the same value could be obtained at a lower price. Thus the fixed charges on industry would slowly tend to diminish. And in time all

these forces would so arrange themselves that some new position of equilibrium would be reached. But who would venture to predict with confidence what would be the exact way in which commodities would then be distributed? We know that fixed charges will alter very slowly; we believe that wages will rise or fall less rapidly than prices; and we can, therefore, have some idea of the effects which will be experienced for a long time after an appreciation or a depreciation of the standard; but to ascertain the final position of equilibrium is a very different matter.

It may be urged that in the long run, and for a given condition of all the factors of trade, the same proportion of the gross receipts will always have to be given to the creditor class as the necessary inducement to make them part with their capital, whatever system of currency might be in force. If this is true, then, in the final equilibrium, the standard selected will make no difference in the value of the balance of the gross receipts, which is available for profit and wages; and no merit can be claimed for one standard over another on account of any permanent tendency either to appreciate or to depreciate. But, considering the complex conditions which determine the rate of interest; considering the impossibility of predicting the future; and considering the improvident character of human beings; it appears to me that the rate of interest charged when the currency is permanently appreciating will not, on an average, be so much lower

But the foregoing conclusions are probably applicable to the final as well as to the first results of appreciating or depreciating currencies.

than the interest charged when the currency is permanently depreciating, as to compensate for the fact that the real value of the interest on each separate loan will always be increasing with an appreciating currency, and always decreasing with a depreciating currency. If this conclusion is correct, the value of the fixed charges on industry would always be less, and consequently the value of the share of the gross receipts to be divided between profits and wages would always be greater with a depreciating than with an appreciating currency. A diminution in the value of the fixed charges was the main advantage claimed for a depreciation of the currency in the foregoing discussion; and the conclusions arrived at in the chapter, probably, therefore, apply not only to a change from stability to appreciation or depreciation, but also to perpetually appreciating or perpetually depreciating currencies.

General conclusions as to the conditions which it is desirable that a standard of value should fulfil.

The foregoing conclusions may be summarized as follows. In the first examination of the effects of an appreciation and a depreciation of the standard, it was assumed that prices in all industries rose and fell together; that there were no charges like royalties, which increase with an increase of production; and that no new loans or other fixed burdens were contracted. Under these hypothetical conditions it was seen that in times of stagnant trade a perfect monetary system should tend to produce constant prices; and that, when trade is progressing, the standard should occupy an intermediate position between that

giving a constant price to commodities, that is, the commodity standard, and that giving a constant price to the output of a given amount of labour, or the labour standard. But many circumstances omitted from this preliminary discussion point to the advantages of a depreciating standard ; or, if production is increasing, at all events to the commodity standard, under which the gross receipts of commercial concerns would tend to increase. For example, the evils due to the price of the total output of commodities falling are far more serious than the disadvantages resulting from a rise in prices. Productive expenditure is stimulated by increasing profits, due to a depreciating standard ; and the burden of indebtedness will decrease with rising prices. Whereas royalty owners and others will absorb quite an undue proportion of the proceeds of industry if prices fall ; and an appreciating standard always puts a drag on trade. Thus no objection should be taken to a slow and steady rise in prices in times of stagnant trade ; and, in times of commercial activity, the standard should approach more nearly to the commodity standard than to the labour standard ; that is to say, whilst the price of commodities should fall in those circumstances, there should be an even more decided rise in the price of the total output of commodities. These conclusions are more reliable as indicating the first effects of any change in the condition of the currency, than as a guide to what would occur if the new conditions were to hold good for an unlimited period of time.

CHAPTER XIX.

HAS THE RECENT FALL IN PRICES BEEN TOO
RAPID?

Would it
have been
better if
prices had
fallen less
rapidly?

It will be remembered that we divided the argument in favour of bimetallism, which was based on the recent fall in prices, into four separate inquiries. The question whether the general level of prices would have been higher had bimetallism been maintained was discussed in Chapters XV. and XVI.; and an affirmative answer was given. There remain three more questions to be considered, the first being whether it would have been better for the general welfare of the community if the fall in prices during recent years had been less rapid. In seeking a reply to this inquiry we must apply the theoretical conclusions arrived at in the preceding chapter to this problem of real life.

The con-
ditions
have been
those of
progressive
trade.

In the foregoing discussion, the conditions which it is desirable that a standard of value should fulfil in times of stagnant, and in times of progressive trade, were both considered. No one doubts that the output of commodities has, on the whole, been increasing since 1873, and this period has not,

therefore, been one of stagnation in the sense in which the word has here been used. And the question is whether, judging by these conclusions as to the best standard for times of progressive trade, gold prices have either risen or fallen more than is desirable since the abandonment of bimetallism in 1873; whether, in fact, the change in the level of prices has or has not been, on the whole, beneficial to the community at large.

No one denies that the last twenty-five years has, on the whole, been a period of falling prices in Europe, a fact which is easily seen by glancing at any of the published series of "Index Numbers" of average prices. If, for example, we take the mean of Sauerbeck's "Index Numbers"¹ for the ten years from 1874 to 1883, and compare it with a similar mean of the years from 1884 to 1893, it will be seen that wholesale commodities fell 21 per cent. in gold price on the average during that mean period of ten years. Retail prices may have fallen considerably less than this; but, after making due allowance for that possibility, it cannot be denied that there has been a fall in average gold prices since the abolition of the last bimetallic laws.

When, however, we pass on to consider whether the price of the output of a given amount of labour has either risen or fallen, we are on far more debatable ground. We have seen that there is good reason to believe that wholesale prices fell about 21 per cent. in a given mean period of ten years. But this fact

The gold standard has undoubtedly appreciated;

but the price of the total output per head has been not far from stationary.

¹ See Appendix.

is of little service to us in this inquiry; for, even if it could be assumed that this represents the average fall in price of *all* commodities during that time, yet we should not know what was the average increase in the output of commodities with which to compare it. No doubt more has been produced at a lower price, but has the price of the total output risen or fallen? If, taking the same decennial averages, we look at the export trade of the United Kingdom, although it undoubtedly increased in volume, we find that the value per head of the population fell from £6 8s. 4d. to £6 5s. 3d., a fall of $2\frac{1}{2}$ per cent.¹ Thus, if the exports represent a fair sample of the whole trade of the country, it would appear that the fall in prices was sufficient to produce a fall in the gold price of the total production per head. But a fall in gold price of the total output is the same thing as a diminution in the gross receipts per head; and it is true that, if such a fall really took place, we should have expected to find that there had been a diminution in wages and profits, one or both (column I). With regard to the movement in wages during this period, the evidence, though it is conflicting, on the whole appears to favour the belief that money-earnings have risen somewhat in the last quarter of a century. But such estimates cannot be very reliable; for though it is comparatively easy to ascertain the *rates* of wages in the principal trades, it is always difficult to estimate the average number of hours per week

¹ See Statistical Abstract for the United Kingdom.

during which wages are earned ; and the earnings of casual labour are not at all well known. As to profits, judging from the income-tax returns, they have undoubtedly increased. These returns, however, are for various reasons not quite reliable for the purposes of this comparison. In the first place, they include profits made out of England, including those made in silver-using countries. Then, again, they also include, besides "profits," various other sources of income to individuals, such as interest on loans, etc., etc., which we have here classed as fixed charges, and which may have been increasing. And, lastly, it will be remembered that in discussing royalties, railway charges, etc., it was shown that, if, during a period of increasing trade, the price of the output remained constant, these charges would increase at the expense of the owner of the industry, whose profits would diminish in a corresponding manner. It is interesting to note, in connection with this view, that, judging from the income-tax returns, and comparing the means of the same two decennial periods as before, it appears that the income arising from the railways of the United Kingdom per head of the population increased 11 per cent., whereas the income from ironworks decreased 45 per cent.¹ and that from mines 26 per cent. during the same interval. Thus it is possible that the profits made by productive industrial concerns decreased during that period, whilst the total income-tax paying

¹ The years 1874 and 1875 were, no doubt, very exceptional ones.

incomes increased. It is necessary, moreover, to be very careful how particular epochs for comparisons of this kind are selected, for a study of the income-tax returns between 1874 and 1887 will show that there is no sign of there having been a general increase of profits per head during that interval.¹

It is, of course, extremely hazardous to venture an opinion on such a debatable subject, but the impression left on my mind is that from about 1874 to about 1888 the price of the total output of the United Kingdom was not very far from stationary; that is to say, that gold followed approximately the law of the labour standard during those years. Since the latter date, there has, I believe, been a slight rise in the price of the total output, the increase in gross profits due to that rise having gone largely into the pockets of those not directly connected with productive industries.

Only a minority of industries have escaped the benumbing influence of diminishing profits.

In the discussions on the effect of appreciating and depreciating standards, two distinct reasons were given for believing that production does not proceed so rapidly with falling as with either steady or rising prices. In the first place, the fact that the price of commodities does not immediately respond to any change in the conditions primarily affecting the value of the standard, affords an explanation of the way in which a fall in prices puts a more or less serious impediment in the way of trade. This check on commerce has, I believe, undoubtedly been felt in gold-using countries since

¹ Gold and Silver Commission, p. 19.

1873. The second reason for anticipating a relative diminution in production when the standard is appreciating is due to the way in which a diminution in profits is normally accompanied by a diminution in productive expenditure. Now, it may be urged that until profits actually begin to diminish, no very serious consequences will flow from the appreciation of the standard. This may be true. And if it is also true that, though prices have fallen, the average price of the total output per head has been constant during the greater part of the time since 1873, then it follows that the money income of the average commercial concern has remained approximately stationary; and, assuming that money wages have not varied materially, it would, at first sight, appear that profits cannot have diminished, and that little or no harm can have arisen in this way. This, however, is not the case. If the price of the total output remains constant, then the profits to the owners of any industrial concern will only remain constant if there is no increase of the fixed charges on that industry, and if it is not subject to any of those charges of which royalties were taken as a typical example. Additions to the fixed charges on industry are constantly being made; and almost every industry is subject to some charges which increase in proportion to production. Then, again, the statistics on which the belief in the constancy of the price of the output was founded refer to average prices, and not to prices in particular industries. If the

average price of the output did remain constant during these years, the price of the output of about half the trades in the United Kingdom must have risen above, and the price of the output of about half the trades must have fallen below, that level. Thus, assuming that the average gold price of the output remained constant for many years after 1873, it appears that all average industries which were subject either to an increase in fixed charges or to any charges of the nature of royalties, and all industries in which prices fell below the average (about half the industries of the country) existed during that period under conditions tending to lower the owner's profits, unless, indeed, wages were falling. If our conclusions as to the level of prices are right, but a minority of the productive industries of the United Kingdom have escaped the benumbing influence of diminishing profits during the years following the great monetary changes on the Continent, and few, therefore, have been carried on in the way most likely to be ultimately beneficial to all classes. In any case, it cannot be denied that the price of the output of individual industries has recently gone down, and wherever this has occurred, the burden of fixed debts and charges must have been more heavily felt, thus producing a depressing effect. English agricultural interests, for example, must have suffered, to a certain extent, from this cause, though the depression of that great industry is probably in a very great measure due to other influences.

A rise in prices, or an increase of profits, therefore, stimulates trade; and the circumstances which ultimately govern production are those to which, in the interest of all classes, most attention should be paid. But, on the other hand, the working classes are immediately benefited by a fall in prices. In the preceding chapter a compromise between these two views was suggested. The influences due to two hypothetical standards of value during times of progressive trade were discussed; the one, the commodity standard, giving constant prices; and the other, the labour standard, giving a constant price to the output of human labour; and the conclusion arrived at was that a perfect standard should lie intermediately between these two limits, but that, of the two, the commodity standard should be the one most nearly approached. But gold prices have, I believe, approached very nearly, if they have not actually touched the other limit—the limit indicated by the labour standard; and if these conclusions are accepted, it is evident that prices have fallen too rapidly for the ultimate well-being of the community.

But if it is true that prices have recently been falling too rapidly, is this too rapid fall likely to continue? That is the next subject of inquiry.

Average gold prices depend on the demand and supply of gold as compared with the demand and supply of the average commodity; and there are, therefore, a great variety of forces at work, some tending to appreciate and others to depreciate the

Thus, if our theoretical conclusions are accepted, it is evident it would have been better if prices had fallen less rapidly.

Is the fall likely to continue?

The probability of prices continuing to fall depends on the balance of

many
opposing
forces.

standard of value. Many of these have already been mentioned, but they must be grouped together, and viewed as a whole, if an attempt is to be made to look into the future.

In the first place, with regard to the forces tending to cause a depreciating of the standard, the demand for gold has been diminishing in recent years on account of the introduction of improved methods of conducting business, by means of which the volume of exchangeable credit on a given metallic foundation has been largely augmented, thus increasing the "money" available for business transactions, without a corresponding increase in the metallic currency. The output of gold is increasing, both in South Africa and elsewhere, and this is another circumstance tending to depreciate the standard.

The above-mentioned influences, which are tending to lower the value of gold, seem likely to increase rather than to diminish in the future. But this is also the case with regard to the forces having an opposite tendency. Russia, India, and Japan—countries which contain between them a very large fraction of the population of the world—are adopting, or on the eve of adopting, a gold standard. The smaller the number of the remaining silver-using countries, the more will the isolation of their position be felt, and the more likely are they to abandon their old standard in favour of gold; an increase in the demand for that metal is, therefore, likely to be experienced before long, because of

other countries (Mexico, for example) adopting the gold standard. Monometallists believe that the increase in the production of commodities has been the main factor in lowering prices; it has, no doubt, contributed in producing that result, and we must and may hope that this cause of appreciation will continue unabated in the future. The population of the world is rapidly increasing, and the increase of business transactions naturally incident to this increase of population ought to be accompanied by a corresponding increment of money, if there is not to be an increasing pressure put upon the currency. If the greater complexity of modern as compared with more primitive industrial systems necessitates a larger amount of the standard of value being used to serve as a basis for the transactions connected with a given volume of production, then this circumstance tends to neutralize the other effects of commercial evolution, namely, those due to the increasing economy in the use of coin resulting from the more and more extended use of credit instruments as money; and, indeed, when civilization is first spreading into new countries, it appears not improbable, that the balance of these opposing forces will give rise to an increase in the demand for a metallic currency. The loss and wear of coins necessitates a considerable annual increment of metal to keep the currencies of the world in sound condition, and this demand for gold will increase in proportion to the increase in the use of gold currencies. And, as the last of the causes of the

appreciation of gold which will be mentioned, the demand for that metal in the arts is said to be "very steadily increasing."¹

The difficulty of foretelling the future makes it wisest to trust to the past for guidance.

In the face of such shifting, such ill-determined, and such complex conditions, who will venture to foretell the future? And it is in the impossibility of foretelling the future that bimetallists, I think, find their strongest argument; for they may well say that the wisest course is to shape our policy by the experiences of the past, without attempting to weigh these conflicting considerations as to the future. Prices having fallen in the past too quickly for the general well-being of the community, we should, therefore, according to this view, assume a continuance of this too rapid fall in the future, granted the continuance of existing currency conditions. Moreover, as a too rapid fall in prices is more harmful than a rise, a currency policy based on this assumption would be shaped with the view of warding off the greater evil of the two.

But if prices are now about to rise for a long time, this plea for bimetalism is greatly weakened.

It is, no doubt, difficult to believe that the present enormous output of gold can go on without sooner or later lowering the value of that metal; and the output seems likely to increase rather than to diminish. If we look forward to a time when the existing condition of things will be no guide as to the change which is likely to be produced by tying the two metals together, and if a period of steady or rising prices should now be commencing,

¹ Royal Commission on Agriculture, 1894, p. 439. Mr. Foxwell's evidence.

and should be going to last until this indefinite epoch arrives, then the plea for the introduction of bimetallism, at the present time, on the ground that it will diminish the fall in prices is destroyed. For, on that assumption, prices would continue to rise under existing monetary conditions until a time arrived when the introduction of bimetallism would be as likely to be harmful as to be beneficial in its effects. What is now wanted is a diminution in the rate of the fall in gold prices, no matter how, without shaking commercial confidence, that diminution is brought about.

Monometallists, who consider that the increase of production of commodities is the chief reason for the decline in prices, are naturally and rightly desirous that this cause should be as prominent as possible in the future; and apparently they would welcome a continuance of the decline in prices to an unlimited extent. But this view indicates a certain confusion of thought. It is not logical to argue that, because an increase of production is good, and because an increase of production causes falling prices, it is therefore wrong to try to check any fall in prices. It would be logical to argue that because a fall in prices produces an increase of production, and because that result is beneficial, we ought, therefore, to force down prices in every legitimate way; this would be logical, but the premises would not be true; for no one thinks that falling prices do tend to increase production. It is a rise, and not a fall in prices, which stimulates

If the total fall due to all causes is likely to be too great, the question is whether any of the causes of the fall will be checked by bi-metallism.

trade; though it is true that the increase in the output thus caused reacts and tends to lower prices. A fall in prices, if the fall is too great, must be a cause of depression. Moreover, the fall in prices in recent years has been due to many causes, and it is the total fall which has to be considered in estimating its effect on trade. If the total fall has been rapid enough to be injurious, and if some of the many causes of that fall produce no direct beneficial results, what possible objection can there be to neutralizing the action of some at least of these forces? This leads to the last of the four inquiries connected with this subject; that is, whether the action of any of the causes tending to produce this fall in prices would be checked by the reintroduction of bimetallism without any evil results arising from that reform.

CHAPTER XX.

CONCLUSION OF THE ARGUMENT BASED ON THE
RECENT FALL IN PRICES.

It has already been seen that, had bimetallism been maintained, prices would have fallen less rapidly; and, as the arguments used in demonstrating that this would have been the case, can be applied to the future in almost the same way as to the past, it seems to follow without further proof that the reintroduction of the joint standard would put a check on the fall in prices in the future. A few observations on this point may, however, be desirable. Whatever might be the effect of the introduction of bimetallism on the other causes of appreciation, it cannot be denied that the demand for gold for monetary purposes would be diminished by the more extended use of silver. India, and the remaining silver-using countries, would not establish gold monometallic currencies; and there would cease to be the same necessity for accumulating gold for the reserves of countries, like Russia and Japan, which are in the act of adopting the gold standard. The fall in prices since 1873 has been exceptionally

Bimetal-
lism would
lessen the
future
demands
for gold
because
silver-using
countries
would not
take to
the gold
standard.

severe, and it would, I believe, have been materially less if silver had maintained its old position in the currencies of the world. Market-ratio bimetallism would not cause an immediate rise in prices, but it would stop this movement towards universal gold monometallism, and, thus, prevent a repetition of the influences which have materially helped to produce the recent marked appreciation of the currency.

Bimetal-
lism would
also act
as a check
on the
apprecia-
tion of the
currency
because of
the greater
stability of
the joint
standard.

It has already been seen that bimetallism will produce a more stable standard of value, and its steadying effect must be considered in estimating the probable changes in level of prices in the immediate future. For example, when a nominally gold-standard country on an inconvertible paper basis resumes specie payments, it will create an increase in the demand for gold; whereas the demand will be both for gold and silver, if its currency laws are bimetallic. In both these cases the effect of the change will be to lower average prices in gold-using countries; but the effect on prices will be greater if the demand is for gold only than if the demand is shared between gold and silver. This will be admitted if the value of the metals as articles of merchandise is considered. When a foreign demand for the standard of value causes the currency to appreciate, sufficient metal is drawn from the market to make its value as an article of merchandise coincide with its value in the coinage. The foreign country demanding specie will probably only require metal of a certain value;

for the value of the currency which it is proposed to establish will be independent of the particular commodity chosen as the standard;¹ and, if the whole demand is for gold, it is obvious that more gold will be taken from the market, and that that metal will, therefore, rise more in value as an article of merchandise, than if the demand is partially satisfied with silver. Thus, when foreign countries resume specie payment, the fall in prices as measured by gold under universal gold monometallism would be greater than the fall of prices as measured by gold linked to silver under effective bimetallism. Gold currencies may appreciate because of an increase in the demand for gold either for making good the waste of the coinage; or on account of the increase in business transactions incident to the increase of population, or to any increase of production; or on account of any increase in the complexity of the industrial system; and, with regard to each of these causes, the appreciation of the standard thus produced will, in the same way, be less rapid if the joint standard is adopted.

Thus, looking either to the special causes of appreciation due to changes in currency legislation, or to the increase in the normal demand for the metals for currency purposes, it appears, granted the continuance of all other existing conditions,

¹ This is evidently true if the quantitative theory of prices may be strictly interpreted; for, as the number of coins increases, the value of each separate coin will decrease proportionately.

that we may count on the fall in prices being less severely felt if international bimetallism is adopted.

But it may be urged that prices will not fall sufficiently quickly for the well-being of the community, or may even rise under market-ratio bimetallism. In the first place, it is to be noted that the introduction of this reform might, in certain circumstances, be beneficial in checking a too rapid rise in prices. At present the tendency of the gold price of silver is to fall, and the effect of adopting a bimetallic system would now be to put a drag on the fall in average gold prices. But if gold should commence to fall in value, and if the fall should be sufficient to make the gold price of silver rise, then the introduction of bimetallism would check the rise in average gold prices. The disturbance due to any great and sudden increase in the output of gold, combined with a cessation in the demands of the great commercial nations for more metallic currency, would, therefore, under the existing conditions as to the production of silver, very probably be less if bimetallism were adopted. Thus it is possible that the introduction of bimetallism might be beneficial in preventing either too great a fall or too great a rise in prices; the former being at present far the most probable contingency. And the question is whether these two contingencies are sufficiently probable to serve as the foundation for a serious argument in favour of this reform. It was seen that it is almost hopeless to foretell whether gold prices will rise in the

But may not prices fall in- sufficiently, or even rise under market-ratio bi-metallism? The ex- perience of the past is the best guide in answering this ques- tion.

future; and the case becomes still more complicated if we have to consider the causes affecting the value of silver as well. In order to determine if bimetallism would produce a beneficial effect, we have to compare gold monometallic prices in the future, when the value of gold may be influenced by further changes in the laws of currency, with prices in the future as measured by the joint standard, which would, if bimetallism were effectively maintained, be influenced in no such way. Bimetallists may again adopt a strong position in saying that, with these complex conditions, it is better to look to past facts rather than attempt any forecast based on theoretical considerations. From this point of view the question for consideration is, therefore, whether the joint standard would have produced beneficial results if it had been adopted in the past.

Prices, as measured by silver, have, it is generally believed, remained fairly constant;¹ and until about 1893 silver fell in gold price in England somewhere about as much as the average commodity. We may therefore conclude that silver, as a standard of value, has behaved, until the last year or two,

Had
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bimetallism
been
generally
adopted in
1873, the
standard

¹ Gold and Silver Commission, p. 18. See also an interesting paper by Mr. F. J. Atkinson in the *Statistical Review* for March, 1897. He concludes that prices are rising; but, from his figures, I should conclude that the oscillations have been so great that it is not possible to determine the general drift of silver prices. See also the Blue Book on the Moral and Material Progress in India during 1891-1892; where, however, the examples of rises in particular prices since 1873 are too isolated, I think, to prove conclusively a continuous rise in average prices.

since that
date would
have
fulfilled
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approximately like the commodity standard. It also appears to me probable that, for some years after 1873, the gold price of the output of commodities per head in England did not vary much, and that gold has behaved somewhat like the labour standard. Gold and silver have, therefore, represented with rough approximation these two hypothetical standards; and if it was right to conclude that a perfect standard of value should occupy an intermediate position between these two extremes, approaching, however, more nearly to the commodity standard than to the labour standard, then it would seem that, had the two metals been tied together by market-ratio bimetallism in 1873, a standard in accordance with theoretical requirements, or one which, if it erred at all, would have erred on the side of not keeping up the level of prices sufficiently, would have been adopted. Thus, judging by the past, market-ratio bimetallism may now safely be adopted, as far as the level of prices is concerned.¹

¹ To assume, had bimetallism been adopted in the past, that the movement in prices as measured by the joint standard would have been the same as the mean between the movements in prices as actually measured by gold, and as actually measured by silver under existing arrangements, is but a very rough approximation to the truth. This assumption might, I believe, be made if the supply and demand schedules for both gold and silver followed the law of simple proportion, and if, on the supposition that the value of the stocks of gold for monetary and non-monetary purposes differs from the value of the stocks of silver, there is a corresponding difference between the schedules in the two cases. None of these conditions do,

But it must be admitted that it is questionable if the state of trade during the last two or three decades should carry much weight as a permanent guide with regard to our future currency policy. Bimetallists contend that gold has not fulfilled the conditions of an ideal standard during recent years, mainly because of the effect of foreign legislation, and not so much because of the inherent qualities of the metal itself. But even if it is urged that either metal, as a commodity, has fulfilled the conditions of a standard of value in a more perfect manner than the other, it must be admitted that the time in which gold is said to have "behaved better," or "behaved worse" than silver is too short to serve as any sure guide as to its conduct in the distant future; and no very strong argument can be based on such narrow foundations, either for or against bimetallism, as far as the permanent merits of the system are concerned. We cannot tell which metal would form the most perfect standard of value when the great commercial nations have ceased to influence the value of money by legislative changes, and when, if ever, the final improvements in connection with the mining industries have produced their ultimate effects; all we can hope to do is to fasten the two together so that the combination will form a steadier standard of value than either taken separately. But as regards the less remote future, probably, hold good, but they indicate the kind of error made in assuming that joint-standard prices would have moved as much as the mean movement of gold and silver prices.

The past is the best available guide for the future; but it is unreliable for the distant future.

the foregoing considerations appear to afford the best indication obtainable as to the future movement of prices under bimetallism, though it may not be a very strong one; and this indication clearly points to prices neither rising nor falling too much under market-ratio bimetallism.

Thus the chain of argument in favour of bimetallism based on the recent fall in prices is complete, though it has one weak link in it.

Whether bimetallism would be advantageous or not in preventing the further appreciation of the standard is, of course, only one of the questions to be decided in this controversy. The comparison of the merits and the demerits of bimetallism has been the subject to which several of the preceding chapters have been devoted; and the probability of benefits arising from the check on the fall in prices should be added as a weight in the balance in favour of the joint standard in giving the verdict on the whole currency question. For, to summarize the whole argument, it has been seen that the general level of prices, since the abandonment of bimetallism in 1873, has been falling too rapidly for the ultimate well-being of the community; that the fall in prices, taking the past as the most reliable guide, is on the whole likely to continue with too great rapidity in the future, this, however, being the weakest link in the chain of argument; that prices would have fallen less rapidly if bimetallism had been maintained; and, as the arguments on which this last conclusion was based apply to the future as well as to the past, that the reintroduction of bimetallism would put a check, but not too great a check, on the fall in prices in future. It obviously

follows from these premises that the joint standard, if adopted at the present time, would have a beneficial effect.

The natural sentiment of all men of liberal mind is to rejoice at falling prices; and, even should a study of the subject shake their faith in their previous convictions, as I think it undoubtedly would, many may nevertheless feel that the troubles due to an appreciating currency have been painted in too high colours. Exaggerated language may often have been used with regard to this subject, but, in my opinion, the merits of monometallism and the dangers of bimetallism have been far more grossly and persistently exaggerated. In selecting the best currency system, it is no doubt a choice of relative advantages and relative disadvantages; but, in making this choice, it should be admitted that the evils due to a too rapid fall in prices, though they may not be appalling, are yet sufficiently serious to weigh heavily in the balance. As a single illustration of this truth, the national debts of the world now amount to some £6,000,000,000,¹ and a fall of 10 per cent. in average prices would have the same effect in increasing the real taxation necessary to pay the fixed money interest on this vast sum, as would have the negotiation by the governments of the world in times of steady prices of a new loan of £600,000,000, a sum about equal to the total value of our own national debt. In both cases the greater real taxation thus thrown on

General remarks on the evils of falling prices.

¹ Lubbock's "Uses of Life," p. 164.

manufacturers must necessarily lessen the value of the amount available for profit and wages. It is true, no doubt, that the only direct effect of an appreciation of the currency through causes primarily affecting the standard is to transfer wealth from one class to another; yet this transference has the effect of lessening the expenditure on productive works, of checking output, and of diminishing the value of the funds available for the payment of labour. It is true, also, that little or no *ultimate* effects are produced by an alteration in the value of the currency; but a consideration of the case of national debts shows how very long it will be before that ultimate condition of things is reached. The fixed charges on industry, though they may not impose such a rigid burden, yet they are enormously greater in amount than all the national and municipal debts combined; and, even if production is only hindered to a moderate extent by the increase in the pressure of such debts, the effect on the well-being of the community may be very considerable. It may be difficult to point to recent years as a warning for the future; but if it is true that, supposing bi-metallism had been effectively maintained, the output of commodities would have increased even more rapidly than it has done, and that the value of the fund out of which the real wages of labour are paid would have been greater, then the check on trade due to the recent fall in prices is none the less a real evil because it is obscured by the general industrial progress due to other causes.

FOREIGN TRADE.



CHAPTER XXI.

THE OPINIONS OF BIMETALLISTS AS TO THE
EFFECTS OF INTERNATIONAL TRADE.

THE more obvious and direct disadvantages arising from the fluctuations in the rate of foreign exchanges were discussed in Chapter XI. The consideration of the important and difficult questions connected with the indirect effects of international trade on home prices was, however, postponed. Having in the mean time dealt with the results to be anticipated from an appreciation or a depreciation of the standard of value, we are now in a position to resume this inquiry.

The effect of international trade has now to be considered.

It has often been contended that prices have been lowered in gold-using countries as a direct consequence of the fall in the value of silver; and that a great injury has thus been inflicted on our own producers. As I do not altogether agree with the opinions usually held by bimetallists on this subject, it will, perhaps, be best to quote the most authoritative statement of their views that I can find. The following extract is taken from the minority report

The views of the bimetallic members of the Gold and Silver Commission on this subject,

presented by the bimetallic members of the Gold and Silver Commission; the italics are, however, mine, being inserted to indicate the passages which appear to me open to criticism.

“The most familiar, and, perhaps, the simplest illustration of our meaning may be found in *the effect of the exchange* on the export of wheat from India, and on the relative position of the growers of that commodity in either country.

“If, when the gold price of wheat is 40s. a quarter, the rupee, measured in gold, is worth 2s., the producer of wheat in India will receive 20 rupees for a quarter of wheat.

“If the gold price of wheat then falls 25 per cent. to 30s. a quarter and the gold price of the rupee falls 25 per cent. to 1s. 6d., the Indian producer will still receive 20 rupees for his quarter, and they will purchase as much as they did before, because prices in India have remained practically the same.

“The position of the English grower, on the other hand, is materially changed.

“He will only receive 30s. instead of £2, and unless all other prices have fallen in the same proportion, he must be a loser. *And the precise measure of his loss will be the difference between the purchasing power of 30s. at the present time and the purchasing power of £2 at the former period.*

“If, then, the English and the Indian producer were competing upon equal terms, before the fall in the exchange occurred, the result will be to largely reduce the profits of the former and to leave the latter exactly where he was before. He is able to take the lower price of 30s. a quarter for his produce, instead of 40s., without

loss to himself, *and the market price of wheat in England is thus unduly depressed.*

“A similar result ensues in the case of articles which are sent from England to silver-using countries, as, for instance, in the case of cotton goods exported from Lancashire to India, *where the effect of the fall in exchange is equally injurious to the English manufacturer.*

“For example, cotton goods are sent to India, for which, in order to make a profit, the English exporter must receive a certain sum, say £10,000.

“With the rupee worth 2s., £10,000 is realized by the payment of Rs.100,000.

“With the rupee at 1s. 6d., Rs.133,333 are required to realize that sum.

“Will the Indian importer give this greatly increased price for precisely the same article as bought before ?

“Obviously not, because prices in India, as we have seen, remain the same, and the English manufacturer is, in consequence, obliged either to take the same silver price as formerly, viz. Rs.100,000, which means a greatly lowered gold price, viz. £7500, or not to sell at all; and in either case he undergoes a loss *which must be traced directly to the fall in the gold price of silver.*

“The industries which have suffered most *from the fall in the exchange* are naturally those which are most directly connected with the trade between gold and silver-using countries, such, for example, as the cotton and the agricultural industries of the United Kingdom.

“We are not prepared to say, and it is not our view, that the fall in the exchange can operate permanently as a bounty on Indian exports, or as a protective duty against imports; but it is obvious—

“First, that the loss *which it occasions* to the producer in gold-using countries, whatever that may be, must

continue to operate until there has been a general adjustment of the price of commodities, or in other words, until all prices and all the incidents of production have on the average fallen in the same proportion.

“Secondly, *that the measure of that loss is the difference between the purchasing power of the higher price received for commodities before the fall and that of the price received at present*; and

“Thirdly, that the date of such a general adjustment is uncertain, but will probably be remote, *and may be postponed for an indefinite period of time.*”¹

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silver.

At first sight this reasoning appears very conclusive; but a careful examination of the whole subject will, I think, show that there is a serious error running through this and all similar arguments. It is no doubt fair for the purposes of discussion first to assume a change in the ratio between the values of gold and silver; and, having made such an assumption, it can, as we shall see, without the least doubt be proved that a change in the relative levels of prices in gold and silver-using countries must occur *coincidentally*, or nearly so, with such a change in the ratio. But from these premises it does not follow that the alteration in the level in prices can, in any sense, be said to be *caused by* the alteration in the ratio. There is nothing in the foregoing argument which goes to prove that the cause which produced the fall in gold prices would not have been equally operative whether that cause did or did not also tend to produce an effect on the

¹ Final Report, pp. 95, 96.

relative values of the metals. To whatever extent gold prices would have fallen if no trade had been carried on with silver-using countries, to that extent the fall in gold prices can in no sense be said to be due to the change in the ratio. Herein lies the error in the bimetallic argument, which I hope to be able to demonstrate.

The idea of price—gold price—in gold-using countries is familiar to all. The gold price of a commodity is measured by the amount of gold which has to be given in exchange for a given quantity of the commodity in question; it depends, in fact, on the ratio of the value of the commodity to the value of gold. In considering questions connected with international trade it will also be convenient to speak of the silver price of goods, even in gold-using countries. Goods might be obtained in England by exchanging silver for them; and the amount of silver which would thus have to be given in exchange for such goods may conveniently be called their silver price. The silver price of a commodity depends, in fact, on the ratio of the value of the commodity to the value of silver. In the same way, in silver-using countries, we may speak of the gold price of goods, though gold is not used as a standard of value.

Definition
of silver
price as ap-
plied to a
gold-using
country.

In the first instance, let it be assumed that a change takes place in the ratio in a gold-using country, without any change in legal tender prices anywhere. This is at all events a possible assumption; for such a state of things would be the first

immediate result of an increase in the output of silver in a gold-using country, before the additional metal had time to flow into silver-using countries. Until that flow took place, there would be no reason why silver should fall in value in silver-using countries, or why silver prices should be affected therein ; and gold prices would everywhere remain unaffected.

A change in the ratio due to causes affecting silver is adjusted by silver flowing into (or out of) silver-using countries, without any change in the ultimate level of gold prices being produced.

For the purposes of illustration let us take the same example as that selected by the Gold and Silver Commissioners—the price of wheat in England, and in India *before the closing of her mints*.

We take, therefore, the price of a quarter of wheat at 40s. in England, and at 20 rupees in India ; and we take the sovereign to be equal in value to the silver in 20 rupees ; or, in other words, we take the rupee as worth 2s. In these circumstances let it be supposed that there is a sudden increase in the amount of silver in the market in England, and that, as a first effect, the quantity of silver equal in weight to a rupee falls in price in England from 2s. to 1s. 6d. ; that is to say, that the sovereign rises in silver price in England until it becomes equal in value to the silver in $13\frac{1}{3}$ rupees. This change in the gold price of silver will not tend to alter the price of wheat as measured by gold in England, and, as long as the additional silver remains in England, neither will it affect the price of wheat as measured by silver in India. There will, in fact, as the first immediate effect, be a rise in silver prices in England, without any corresponding rise in silver prices in India.

Now consider the case of a merchant who has been in the habit of exporting sugar, for example, from England to India, and of importing wheat from India to England. The cost of the carriage both ways must ultimately be divided between the purchasers of the goods in the two countries, according to the principles discussed in all treatises on economics; but, with regard to the broad issues here under consideration, this aspect of the question may be neglected. Putting the cost of transport of both goods and specie aside, we can see, therefore, that our merchant will purchase sugar to the value of £2 in England; he will export it to India, and sell it for 20 rupees; and with those rupees he will purchase and bring back to England a quarter of wheat. Will he continue to carry on his business in this manner after the fall in the value of silver in England? He could do so, because prices will at first nowhere be affected; but he certainly will not. With his £2 he will buy an amount of silver in England which can be coined into $26\frac{2}{3}$ rupees in India; he will export this metal to India, and with it he will purchase $1\frac{1}{3}$ quarters of wheat, or a third of a quarter more than he could have obtained if he had stuck to his old line of business. Thus there will be a diminution in the amount of sugar exported to India, and silver will be exported in its place. The export of silver will raise the value, and therefore the gold price of that metal in England; the merchant will find, as time goes on, that he can get less and less silver for his sovereigns; and the

silver price of wheat and other commodities will fall in England. In India this traffic will have the opposite effect; silver, becoming more abundant, will fall in value, and silver prices will rise; and the merchant will find that he is getting less wheat for the silver he sends out. This export of metal to India will, therefore, in time cease to be profitable; and this will evidently occur at the moment when the silver price of wheat (and of other exportable commodities) has fallen in England and has risen in India to such an extent as to make them identical in the two countries; for then there will be no special gain in shipping silver to India in preference to any other article of merchandise. Then, and not till then, will the merchant go back to his old trade, and the export of sugar will be resumed.

Thus the equilibrium of trade in the above illustration will ultimately be established without any alteration in the value of gold, *or any change in the level of gold prices in England*. And this flow of metal is certain to take place, being so profitable, provided other things remain the same, and provided no other method of permanently adjusting the level of prices can be shown to exist. The rise of silver prices, or the depreciation of the standard in India, will no doubt cause a long-continued, though not a permanent, disturbance of internal trade, the effect of which must be considered. But looking only to the final results, the raising of prices as measured by silver would appear to be

the only ultimate outcome of any cause tending to lower the value of that metal.

When an attempt is made, by reference to trade statistics, either to refute or to confirm the belief that the adjustment of prices after a disturbance in metallic values is brought about by a flow of metal in one direction or the other, great difficulty is experienced in the investigation. The idea of a single merchant carrying on trade in the manner described in the foregoing illustration is, of course, not in accordance with facts, and is only used to indicate the economic forces in action. There are, moreover, always other causes at work, besides those connected with the currency, which tend to alter the relative level of prices in different countries; and such alterations in level may obviate the necessity for any movement of the precious metals, or even make them move in the opposite direction to that anticipated from a mere study of the relative values of the metals. Independent forces primarily affecting the metals themselves, such, for examples, as those connected with their use in the arts, may also affect the amount required for export and import. And as any change in monetary conditions is always gradual, and not sudden as in our illustration, the method of adjustment of international values above described is generally so masked and confused by other influences as to be indiscernible.

Although no reason has been seen for believing that gold prices are permanently influenced by causes primarily affecting the value of silver, yet

It is difficult to perceive the flow of metal during the adjustment.

The precious metals being

exported
in place
of other
commodi-
ties will
cause a dis-
turbance of
trade.

it is obvious that trade will be disturbed in some way or other by the movement of that metal during the period of adjustment. In the illustration above given, it was seen that the export of sugar would be checked. The value of imports must equal the value of exports; and unless there is some reason for an increase in the value of the imports, it is evident that the exported metal must more or less completely displace some other previously exported commodity of the same value. But considering what an enormous superstructure of credit is built in civilized countries on such a comparatively slender metallic foundation, it would appear that the amount of metal, which in most cases has to be exported to produce the necessary adjustment of prices, will be small in comparison with the total volume of the international trade. After the conditions affecting the currency have become stable, the equilibrium of prices between the two countries will, therefore, be quickly reached, and no lengthy disturbance will be produced by the displacement of other commodities by the precious metals.

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But though such disturbances are not very serious, they are objectionable, and should be remedied or alleviated if possible. Under all currency systems the constant changes in the balance of international indebtedness will tend to cause the metals to flow backwards and forwards between different commercial centres. This cannot be helped. But if a universal bimetallic system were adopted, the effect of an increase in the production of silver

would eventually be that prices would rise everywhere alike; the new metal would gradually be distributed evenly throughout the commercial world; the amount absorbed into the currency of the country where the output took place would not, of course, be exported in the manner above described; and the disturbance of trade due to the export of metal would be reduced to that extent. Moreover, if gold, for example, were to rise in value everywhere under existing conditions, there would tend to be a decrease in the use of that metal in the arts; and part of the gold thus dislodged from employment in silver-using countries would flow into gold-using countries for employment in the currency; whereas, if both countries had bimetallic currencies, there would be no such movement of metal. Disturbances to trade of this character would, therefore, no doubt be somewhat lessened by the adoption of a common international standard of value, whether that standard were bimetallic or monometallic. But as the alleviation would be small, and as the troubles complained of are not very serious, bimetallicists can claim no great merit for their system in this respect.

The harmful effects on trade due to the movements of the metals are not those, however, of which bimetallicists usually complain, and other and more serious alleged evils have to be investigated. Thus far I have given *prima facie* reasons for believing that the necessary adjustment of prices, which must occur coincidentally with a change in the ratio of the values of the metals, will always be accomplished

The chief complaint of bimetallicists is, however, that gold prices have been forced down by trade with silver-using countries.

by an alteration in the level of prices in the country the standard of which is primarily affected, without any alteration in the level of prices in the country where the standard is not primarily affected. This would appear to be the obvious result. But it is suggested that silver prices in uncivilized countries are so fixed and regulated by custom that some other method of adjustment than that above described would in reality be found. Changes, it is said, always follow the line of least resistance; the greater mobility of gold prices will allow them to fall; and in this way the adjustment will not necessitate the flow of silver from one country to another, and it will be made with little or no rise in silver prices.

If a change in the ratio has resulted from causes affecting silver, then no permanent fall in gold prices can have been caused thereby.

This view as to the influence of international trade will not, I think, bear careful investigation. In the first place it is difficult to prove that prices are more stable in less civilized countries.¹ Then, again, if more silver is thrown on the market, whilst the conditions affecting other commodities remain unchanged, it is easy to see that more silver will have to be given in exchange for a given amount of these other commodities; that is to say, it is evident that an increase in the supply of silver is normally a factor tending to cause a rise in silver prices. If this is so, what is to prevent silver prices rising eventually in proportion to the fall in the value of silver which the increase of that metal on the

¹ See, for example, Mr. F. J. Atkinson's paper on prices in India in the *Statistical Journal* for March, 1897.

market would naturally tend to produce? This would seem to be the inevitable result; but if this does not occur, then a fall in gold prices is not necessary to bring things to a state of equilibrium. Moreover, it is not explained how an increase in the amount of *silver* can alter the value of *gold*; that is to say, how such a cause can make it possible for more goods to be obtained than previously in exchange for a given amount of *gold*; for that is what the suggestion really amounts to. Bimetallists rely, as I think rightly, on the quantitative theory of prices; but, if they do so, they must not throw over that theory because it does not square with their views on any particular question; and in this instance they must explain how the relationship between the volume of the English *gold* currency and the volume of English business is affected by any change in the demand for or the supply of *silver*. Until these objections are answered, we shall, I think, be right in adhering to the opinion that prices in gold-using countries cannot be permanently and materially affected by any cause primarily affecting the value of silver. In the following chapter I shall give reasons for believing that prices in one country are temporarily affected by variations in the value of the standard in other countries. But, if our conclusions are right as to the ultimate results, it is evident that the recent fall in gold prices—in so far as the fall is permanent—cannot have been due to a fall in the value of silver, but must be the result of other

independent influences; and that no permanent suffering to British producers can have been caused by any change in the ratio resulting from any change in the conditions primarily affecting silver.

If a change in the ratio has resulted from causes affecting gold, then gold prices will ultimately fall to the same extent whether or not trade is carried on with silver-using countries. If, on the other hand, a change in the ratio is due to causes primarily affecting gold, it is even more evident that producers in gold-using countries will experience no permanently injurious effects from trade with silver-using countries. We have seen that disturbances due to an increase in the supply of silver will be adjusted by a flow of that metal into silver-using countries, without any permanent effect being produced on gold prices. It could, of course, by similar reasoning, be proved equally conclusively that any disturbance due to an increase in the demand for gold in any gold-using country, would be adjusted by gold flowing into that country from all other countries (except where it is required to satisfy any similar demand), and by a fall in gold prices in the countries from which it is drawn, without any effect being produced on silver prices. An increase in the demand for gold in gold-using countries would not at first tend to raise the value of that metal in silver-using countries, but this influx of gold into gold-using countries would prevent the rise in the value of gold being greater in gold-using countries than in silver-using countries; and in this way the gold price of commodities would remain the same in the two places. But the point to note is that if the fall in gold prices is due to causes primarily affecting gold, then

there is no necessity whatever to drag in the effect of trade with silver-using countries to account for that fall. In the next chapter we shall see reasons for thinking that the fall in gold prices may be hastened, but not increased, by external trade. But whether the fall in gold prices resulting from causes primarily affecting gold is thus hastened or not, it cannot be said to be due to the influence of international trade. The fall would ultimately be equally great whether such trade existed or not.

It may, perhaps, be said that the foregoing argument in no way proves that the English producer will not suffer from such a fall in prices. This may be freely admitted. If gold prices are falling, whilst silver prices remain stationary, it will nevertheless be true that exported or imported goods have everywhere fallen alike in gold price. The fall in the gold price of goods made in silver-using countries will be exactly the same as the fall in the gold price of the same goods made in gold-using countries. It is true, to revert to the illustration of the Gold and Silver Commissioners, that "the English manufacturer . . . is obliged to take the same silver prices as formerly (for his cotton), viz., Rs.100,000, which means a greatly lowered gold price, viz. £7500 (as compared with £10,000), or not sell at all." But it is equally true, since the assumed rise in the value of gold affects prices in all places alike, that if he is selling his cotton to an English merchant for use at home, he must accept "a greatly lowered gold price, viz. £7500, or not sell at all." The case is precisely

The producer in gold-using countries has suffered by the fall in gold prices, but these arguments do not prove that his sufferings are due to international trade.

the same whether he is selling to England or to India, and his sufferings cannot, therefore, "be traced directly to the fall in the gold price of silver." It is also, generally speaking, true that the loss to the producer, due to the diminution in his gross receipts, will go on until "all the incidents of production have on the average fallen in the same proportion ;" but this fact again in no way connects that loss with the effects of international trade.

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Thus whether we assume the change in the ratio of the value of the metals to be due to changes in the causes primarily affecting silver or to changes in the causes primarily affecting gold—it can be due to no other causes—we have thus far seen every reason to believe that trade with silver-using countries produces no permanent effect on gold prices. As to the temporary effects, no reasonable explanation has yet been given as to how they can arise. The subject is so difficult and complex that it would be presumptuous to write with confidence concerning it. But I will nevertheless state my own views in the following chapter as to the only possible effects which can arise from variations in the value of the standards in other countries.

CHAPTER XXII.

THE INFLUENCE OF TRADE WITH A COUNTRY HAVING
A DIFFERENT STANDARD OF VALUE.

IN this chapter we shall be occupied with the question of trade between two countries, the value of the standard in the one being subject to some disturbing influence; whilst, in the other, all conditions affecting the standard are supposed to be stable.

The influence of commerce of this description will more easily be discussed if names are given to the countries concerned. Let us take England and India (*before the closing of her mints*) as the typical gold and silver-using countries; and, at a time when both gold and silver prices are in a stationary condition, let us assume either that there is an increase in the output of silver, or that some other change takes place in the conditions of the silver market, which tends to lower the value of that metal; whilst all the other conditions of trade remain unaltered. Silver prices will no doubt begin to rise; and we have to ascertain what will be the effect of such a rise in prices on international trade.

The temporary effects of trade with a country with a depreciating standard will now be considered.

The case of rising prices has been selected for

examination in detail. The discussion could be repeated with the assumption of a fall instead of a rise; but the result would merely be to show that the effects to be anticipated would be the opposite to those here indicated as probable; and all the necessary conclusions can be extracted from this one example.

Some of the influences due to the demonetization of silver may thus be studied.

With reference to the application to existing facts of any conclusions which may be arrived at, it may be urged that rupee prices have not risen, or have not, at all events, risen very decidedly. But the influence of international trade is due to the relative rather than to the absolute monetary conditions of the countries concerned. For example, if it be a fact that silver prices in India would have been lower had silver not been demonetized in Germany, then by discussing the effect of a rise in silver prices in India, whilst gold prices in England are assumed to remain stationary, we shall be studying the way in which the existing conditions of trade differ from, or compare with, the conditions which would have existed had the demonetization of silver produced no such effect on silver prices. The value of gold may also have been affected by the same currency legislation, but the effect of such a fall in gold prices must be separately considered.

These effects must be traced to the way in which the actual conditions of trade differ

In the chapters dealing with appreciating and depreciating standards, it was seen that little or no permanent effect on internal trade is produced by any change in the conditions primarily affecting the standard of value; for, after a time, the factors of

trade gradually become adjusted to the new conditions; and the disturbance slowly dies out. Thus the absolutely permanent influence on Indian trade of the assumed rise in silver prices may be neglected. As the conditions affecting gold are assumed to be stable, it may be asserted with even greater confidence that English internal trade will ultimately be unaffected by the assumed fall in the value of silver. And if it can be truly asserted of the ultimate state of the internal trade of both countries that it is not affected by these monetary changes, it must also be equally true of the trade between them. For example, though the present rate of exchange may have a material influence on the existing trade with India, yet no one would assert that that trade is now materially influenced by any variations in the ratio which took place a century ago. It is, in fact, generally admitted that the effects under discussion will no longer be felt when "all prices and all the incidents of production," including interest on debts, "have on an average fallen in the same proportion,"¹ and to their ultimate levels. When the normal is reached, the disturbance will have died out; and, that being the case, it would seem that if we desire to discover what are the effects of the change in the ratio during the process of adjustment, we should turn our attention to the way in which the conditions of trade during that period differ from the normal or ultimate conditions.

from the normal conditions during the process of adjustment after the disturbance.

¹ See p. 286.

If the change in the value of the standard does not tend to affect production, then it will have no influence on international trade.

The first effect of the assumed change in the conditions primarily affecting the value of silver will no doubt be a gradual rise in silver prices. But so far no reason has been given for believing that gold prices will be influenced by the same cause. Thus it would appear that, *if the production of goods in India would not be influenced by the rise in silver prices*, merchants would find the same amount of Indian goods in the English market as heretofore, and at the same gold price; and, if this would in reality be the result, I cannot see how the change in the value of silver could affect their transactions in any way. If the assumed increase in the output of silver does not proceed from mines situated in India, then coincidentally, or nearly so, with each step in the rise in silver prices, there would be a flow of silver into India of sufficient magnitude to make the silver price of goods the same in India as in gold-using countries. In all probability silver will displace some other commodity from the import trade of India; but the effect of this displacement may now be neglected, for that is not the complaint we are investigating. Thus the goods entering India from England will rise in silver price. But they will only rise in silver price to the same extent that goods made in India have risen; and, as buyers and sellers will find that all goods have risen alike, there appears to be no reason why the change in the ratio should affect the way in which Indian and English-made goods are exchanged one for the other; *provided that the quantity of both classes of*

goods in the market remains unchanged. Thus, as long as the production is unaffected, the change in the level of prices due to any change in the conditions affecting the standard of value in either country will have no influence on the international trade between them.

But can it be assumed that production in India will not be affected by the rise in silver prices? This point has been discussed at length in Chapter XVII., and reasons were there given for believing that a rise in prices does tend to stimulate commerce for a more or less considerable time. And this is, I think, practically the only circumstance which has to be kept in view in studying the effect of variations in the value of the standard on international trade. The output of commodities would be increased under the influence of such a rise in prices as that assumed; and we have now to ascertain what will be the effect of such a general increase in production in India on her trade with England, where no such stimulating influence is supposed to exist.

The results likely to follow an increase of production in a silver-using country—whether an actual increase, or an increase in comparison with the production which would have taken place had the supposed cause affecting the value of silver not been operative—are very complicated, and difficult to trace out fully. International trade is, in fact, barter; and India, having under the supposed conditions an increased supply of goods in her market—or offering a larger quantity of goods for barter—

But production will be affected by the depreciation of the standard.

A rise in prices temporarily increases exports and imports;

will both part with more of her own productions and receive more goods in exchange for them ; that is, in comparison with the state of things which would have existed but for the supposed stimulus to Indian commerce. Indian exports and imports will, in fact, both increase.¹

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But this will not be the only result of the rise in silver prices. At first there will be no greater quantity of English-made goods offered for sale in the Indian market, because English commerce is supposed to be subject to no such stimulating influence, and all the other conditions of trade are supposed to remain in a stable condition. There will, therefore, be an increase in the quantity of Indian-made goods in the market as compared with the quantity of English-made goods. When a commodity becomes more plentiful, it normally tends to fall in price ; and Indian-made goods will, therefore, fall in price as compared with English-made goods.

¹ If an increase takes place in the production of one commodity only, it cannot be assumed as even probable that the total product of that commodity will be exchangeable for a greater quantity of commodities produced in other countries. The value of the commodity is quite as likely to fall so much that the total product becomes less valuable. This, I presume, might occur with the whole of the export trade from any country. But, as under the assumed conditions, there will be a general stimulus to all trade in the silver-using country, an increase will take place in the demand for goods of all sorts ; and, in these circumstances, it appears to me almost certain that the import trade will increase also. But, in any case, the conclusions arrived at in this chapter depend on the fact that trade will be disturbed, and not on the particular disturbance which will occur.

India will, consequently, have to give more of her own goods for a given quantity of English-made goods; or, in other words, Indian exports will increase in volume as compared with imports into India. Combining this conclusion with the conclusion arrived at in the last paragraph, it would appear that the probable result of the assumed change in the conditions affecting the value of silver will be that both exports from and imports to silver-using countries will increase in volume, but that the exports will increase more than the imports.

In short, under the assumed conditions, the trade of India would be stimulated by currency causes; and the trade of England would be stimulated by the better terms on which the barter with India could be carried on.

Thus far silver-using countries have been regarded as customers with whom gold-using countries are dealing rather than as rivals in trade with whom they are competing. The question of rivalry must, however, be considered; though, as far as this particular branch of international trade is concerned, it is the less important consideration of the two. In order to facilitate this discussion, let it be assumed that no commercial intercourse exists between England and India, but that both countries are engaged in trade with Japan. Assuming, as before, that trade in India is inflated by a rise in prices, whilst production in England remains stationary, it is evident that Indian-made goods entering the Japanese market will increase in volume, whilst the quantity

Silver-using countries must be regarded both as the customers and as the rivals of gold-using countries.

of English-made goods for sale will remain stationary. The Indian-made goods will, therefore, tend to fall in price in Japan, which will not be the case with the English-made goods. But goods of one kind must keep on the same level of prices, and English-made goods must, therefore, be dragged down in price by the fall in Indian-made goods; a check will thus be put on this trade, and the importations from England will diminish. It is, in fact, obvious that in these circumstances the imports into Japan from India will increase, and those from England will diminish; and that this will be an advantage to India and a disadvantage to England. And the general results will not be materially altered if we imagine either that the Indian-made goods are exported to England instead of to Japan, or that they are consumed in India itself. The results indicated in the preceding paragraph as those arising from international trade of a non-competitive nature no doubt remain true; but from this it is evident that any inflation of trade resulting from a rise in silver prices will be a temporary benefit to silver-using countries, and that it will be a temporary injury to all trades in gold-using countries which compete with silver-using countries, wherever their markets may be.

Trade with countries with stable standards will hasten the process by which prices are

Some of the effects of the change in the ratio will be more easily traced out if a hypothetical and extreme case is taken for examination. Let us make the same assumptions as before, but let silver-using countries be represented by a small imaginary island

near England, where there is a rupee currency and an open mint. Let it also be assumed that wheat is the only commodity produced on the island; that it is all exported to England; and that the whole of the commodities consumed on the island are imported from England. The whole of the commerce of the island will, therefore, consist of an international trade with a country with a different standard of value. Now if a fall takes place in the value of silver, other things remaining the same, a given quantity either of wheat or of gold will be equal in value to an increased amount of silver. In these circumstances the exporter of wheat, if he exchanges his wheat for silver in England, will be able to obtain a larger quantity of metal than heretofore; and this metal he can get coined into an increased number of rupees in his island, the increase being in exact proportion to the fall in the value of silver. In short, the rupee price of wheat will rise with little or no delay to the normal level due to the fall in the value of silver. And, as to the imports into the island, they can only be obtained in exchange either for silver, the money of the island, or for wheat, the only exportable commodity; wheat, as we have seen, will rise in price at once to its ultimate level; and a given quantity of silver, if exported, will only enable its owner to obtain in exchange for it, in England, a diminished quantity of goods, the diminution being in exact proportion to the fall in the value of silver. Thus both exports and imports—that is, in the imaginary

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circumstance, the whole of the commodities to be found on the island—will at once rise in silver price in the same degree that silver falls in value in England. But we have seen that under ordinary conditions the stimulating effect of a rise in prices is in part due to the fact that prices do not tend to respond immediately to any change in the conditions affecting the value of the standard; or, in other words, because they do not reach their normal at once; the explanation already given of this stimulating effect being that the delay in the rise of prices is equivalent to producers being ready to accept less of the goods of others than heretofore in exchange for their own; a state of things which greatly facilitates commercial transactions. On the imaginary island, prices will, however, as we have seen, rise immediately or almost immediately to their normal level; and this stimulating influence will therefore be felt but for a very short time, if at all.

When the standard of value is depreciating, wages and many other elements of prime cost will not rise as quickly as the price of the finished article; and consequently profits always tend to increase in these circumstances. But when profits are increasing, it is possible for producers to lower their price lists; or, in the case of a general tendency to rising prices, it is possible for them to raise their price lists less rapidly than that tendency would appear to warrant. Competition between different producers always tends to keep down profits; and competition will,

therefore, in times of rising prices, have the effect of preventing producers from raising their prices as quickly as would have been the case if profits showed no tendency to rise; that is to say, producers will not at once, as it were, take the full advantage of the tendency of the value of the standard to fall. This is why, under ordinary circumstances, prices do not immediately respond to any change in the conditions primarily affecting the standard of value.

But in the small imaginary island, previously under consideration, the wheat-growers, being very few in number, will be practically only affected by the competition of the wheat-growers of England, where there is supposed to be a stable gold currency, and where wages, etc., will continue to absorb the same proportion of the gross receipts. Thus the island wheat-producer, being practically uninfluenced by the competition of others similarly circumstanced to himself, will be able at once to raise his prices to the ultimate level; his profits will, therefore, increase very rapidly; and this will produce a stimulating influence on his trade. But when the labourers see what large profits the producers are making, they will demand, and they will be in a position to obtain, an increase in wages. Wages will rise more rapidly because of the more rapid rise in prices. Thus, on the island, not only prices, but wages also, and in like manner all the other factors of trade, will reach their normal state more quickly than would have been the case if no trade with a gold-using country had existed.

And wages and the other incidents of production will, in the same way, be more rapidly adjusted to the new conditions.

Commodities common to the two countries will reach their normal price more quickly than commodities peculiar to the country with the depreciating standard.

If, contrary to our original supposition, there are some commodities on the island which are neither exported nor imported, nor likely to be exported or imported, then their price will be settled entirely by the competition amongst the producers on the island.

We have seen that, when forces are at work tending to make the standard depreciate, the competition of different producers, all of whom find their profits increasing, will normally tend to check the rise in prices. This drag on the movement of prices will be fully felt on the island in the case of non-importable and non-exportable goods, because the competition amongst the sellers of such goods will be confined to producers, all equally benefited by the depreciation of the standard. Prices would not, therefore, in their case rise to the normal at once; whereas the prices of exportable and importable goods, as we have seen, would rise to their ultimate height at once. Hence, until all the economic forces had worked out their full effects, the price of exportable and importable goods will have risen more than the price of goods not included in the import or export trade.

The greater the volume of international trade the more these influences will be felt.

With an extreme case, such as that of the imaginary island, extreme results will be obtained. But the forces disclosed by the consideration of such hypothetical circumstances will always be felt, though, when the two countries are comparable with each other in size, they will be felt less severely. Reverting to the case of England under stable currency conditions, and of India with free coinage

of silver and a depreciating currency, it is, I think, clear that the effect of trade between the two countries would be to force up prices to their normal level in India more quickly than if no such trade existed; to lessen the duration of the inflation due to the rise in prices, though possibly to increase its intensity for the time being; and to make all articles common to both countries rise in price more rapidly than goods which are not capable of being exported or imported. Indian cotton, for example, would rise in price, under the assumed conditions, as compared with Indian millet; but there would be no tendency, except perhaps temporarily, for the silver price of cotton to rise above the level to which in any case it would ultimately attain.

Thus, to summarize the effects *on the commerce of a silver-using country* of trade with a gold-using country, when silver is tending to fall in value, and when gold prices would otherwise be stationary, it appears that both exports and imports will increase, exports increasing, however, more than imports; that imports will rise in price as compared with exports; and that both exports and imports will rise in price as compared with goods not affected by the international trade in question. These are the results which will be felt when production is increasing in the silver-using country in consequence of a rise in prices; but when production is diminishing, as it must do when trade is reverting to its normal condition, all these influences will be reversed, until the ultimate equilibrium of trade is reached. Every

Summary of the results of international trade on a silver-using country when a fall takes place in the value of silver;

such disturbance to trade is, no doubt, certain to be followed before long by other disturbances ; but the results above described are those which would, I believe, be seen to follow any one disturbance if it could be completely isolated from all its surroundings.

The effect of international trade under the same conditions *on the gold-using country*, with its currency under stable conditions, is easily deducible from the above conclusions. We have seen that a rise in prices in a silver-using country will stimulate its trade with all other countries, including gold-using countries. Both the exports from and the imports to the gold-using country will, therefore, increase in volume ; but, as it was seen that Indian exports would increase more than Indian imports under the assumed conditions, it is evident that the imports into a gold-using country will increase in volume more than the exports. We are assuming no change to take place in the conditions affecting trade in the gold-using country ; and the quantity of goods manufactured for export and of those received as imports will, therefore, increase as compared with the amount of goods not included in the international trade. Prices tend to vary inversely with the quantity of goods in the market, and there will, therefore, be a tendency for the price of both exports and imports to fall in comparison with articles not affected by the international trade, imports falling more than exports. As there will be an increase of trade in the gold-using country,

and of the results of the same causes on the gold-using country.

without any corresponding change in the currency, it is also to be observed that, according to the quantitative theory of prices, some tendency to a general fall in prices must be produced.

We have just seen that the increase of imports from silver-using countries into England—the typical gold-using country—will make these goods fall in price temporarily as compared with English-made goods. Thus Indian imported wheat will tend to fall in price as compared with English-grown wheat. All wheat must, however, remain at about the same level of prices; and the inevitable result will be that English wheat will be dragged down in price to a certain extent, great or small, as a result of the rise in silver prices. Here, then, is an instance of the harmful influences arising from the depreciation of silver, which will be felt by those trades in gold-using countries which are competing with similar trades in silver-using countries. But there are, I think, reasons for believing that agricultural prices in gold-using countries cannot have fallen to any serious extent from this cause. We have seen that the influence under discussion is due to the increase in the production of Indian wheat; and, as we are endeavouring to trace out the effect of any changes in the condition of the currency on prices, we must neglect the influence of any increase of production arising either from the extension of railways in India or in other silver-using countries, or from other causes which would have been equally operative if silver prices had not risen. Statistics

Agricultural interests in gold-using countries will be somewhat adversely affected by a rise in silver prices;

give us little guide in separating the results of different stimulating influences. It is, however, evident that agriculture, especially in India, will respond less readily than many other industries to the effect of rising prices. The output of cereals cannot be materially increased merely by the application of more capital to the same land; and an increase in the profits of any one proprietor will, therefore, have comparatively little effect in increasing the productiveness of his holding. Moreover, the increase in profits, on which the beneficial effect of rising prices largely depends, can only be fully felt in the case of a complex industrial organization. Take the case of wages; if the land is cultivated by peasant proprietors, wages and profits merge into one another; profits cannot be swelled by a smaller proportion of the gross receipts being absorbed by wages; and profits not increasing, the stimulating effect of any rise in prices will be greatly diminished. For both these reasons it follows that Indian agriculture is likely to have been far less affected by any rise, relative or absolute, of silver prices than would at first sight appear probable; and, if this is so, trade with silver-using countries, though it may have produced some slight temporary depressing effect on English agriculture, cannot account for more than a fraction of the fall in prices which has recently taken place.

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We have also seen that the exports from England will tend to increase with a rise in silver prices. This result will be chiefly, if not entirely, felt in the

case of goods not also made in the silver-using country; for, if the trade in question is one which competes with the products of silver-using countries, our home industry would suffer from the increase in the foreign production. If, for example, the cotton industry has been stimulated in India by the relative conditions of the two currencies, then, in all probability, less cotton has been demanded from England than would otherwise have been the case; and our manufacturers of cotton goods have suffered in consequence. In fact, some English trades will be stimulated, and others—probably the smaller number—will be injured by any fall in the value of silver; whilst the result to the mass of the people will be beneficial because of the increase in the imports.

Space does not permit of a repetition of the above arguments in order to trace out the effects of a rise in the value of the standard. If the assumptions previously made were reversed—that is, if we were to take into consideration the case of India with her standard under stable conditions, and of England with her currency appreciating through causes primarily affecting gold—then by retracing the whole of the foregoing arguments it could be proved that the trade of England, including her international trade, would be depressed as a direct result of the fall in gold prices; and that there would be a corresponding, though much slighter, wave of depression in India (especially as regards articles affected by the international trade), because of the change for the

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Summary
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of the
standard.

worse, from an Indian point of view, in the terms of the international barter. Exports from and imports to England would both diminish, but (as in the case of a rise in silver prices) exports would diminish more than imports. Moreover, the price of all commodities in England, but more especially those included in the international trade, would be forced down to their normal level more quickly than would have been the case if no trade with silver-using countries existed; though the ultimate fall in prices would not be increased thereby. As the trade of silver-using countries would not be primarily affected by the depressing influence of the fall in gold prices, the demand for goods from gold-using countries would not at first be diminished; and, consequently, the depression in gold-using countries would be mitigated in the case of certain classes of goods required for export to silver-using countries. Thus, if no external trade existed, all English manufacturers would suffer through the fall in prices; whilst the trade with silver-using countries, with its currency assumed to be under stable conditions, would tend to make their suffering shorter and possibly more severe, and would also cause some to suffer more and some less than the average. Looking at the question from an Indian point of view, it could be proved, as regards those trades where there is rivalry between English-made and Indian-made goods, that India would be benefited by the depression in English commerce; for the diminution of English exports due to the fall in gold prices would

make English-made goods rise in silver price in India as compared with Indian-made goods. English cotton goods, for example, would tend to rise in prices as compared with Indian cotton goods; but, as all cotton goods must keep at about the same level of prices, the effect will be to raise the price of Indian cotton goods, and to temporarily stimulate their manufacture in India; provided that they are sufficiently nearly of the same class of goods as those exported from England to enter into competition with them. In this case, as in all others, it must not be forgotten that the effects here described are relative, not absolute; and that an actual increase in the export of English cotton goods, whilst the ratio was rising, would not disprove the existence of the forces described; for it would be impossible to prove that the export would not have increased still more rapidly had the two countries had a common standard of value.

Reasons have been given in previous chapters for believing that prices would now be materially higher but for the abandonment of bimetallism. It may, therefore, in a sense, be said that the various continental nations concerned caused a fall in gold prices by the monetary policy adopted in 1873 and subsequent years. If this is true, the disturbing influences indicated in the foregoing paragraph are those which must have resulted from the effects of this currency legislation wherever there was a considerable trade with silver-using countries.

It now remains to be seen, to what extent these

An increase in the rapidity of the return to normal conditions, due to international trade, is a doubtful advantage.

complex effects are harmful or beneficial. The only argument which can, I think, be suggested in favour of their being beneficial is that, as the effect of commerce with a country whose currency is under stable conditions is to increase the rapidity with which all the factors of trade reach their normal levels, it appears that international trade of this description will shorten the period during which industry would be disturbed by any changes in the conditions of the currency. This, however, is a doubtful advantage. If prices are rising through causes primarily affecting the currency, and if they are forced up rapidly to their normal level by international trade, the danger of a reaction may be increased; whereas, if the rise in prices was more gradual, the result might be on the whole beneficial, or, at all events, less harmful. If the standard is appreciating, the benefits arising from shortening the period of falling prices may be dearly paid for by the increase in the suffering due to the greater rapidity of the fall. But the point is only of theoretical importance; for no one would, I imagine, advocate the introduction of a number of different standards of value into different countries—a policy by which alone this assumed advantage could be fully reaped.

The way in which any variations in the relative values of different standards

Whether we look either to the country with its standard under stable conditions, or to the country with its standard under unstable conditions, we have seen that the most important effect of trade between the two will be to cause a relative

instability in the prices of different commodities. International commerce has, in fact, under such conditions, a temporary stimulating effect on some trades and a temporary depressing effect on others. This result appears to me to be an almost unmixed evil. If, for example, the cotton industry of India has been fostered by the fall in prices in England, a reaction must take place when trade returns to its normal condition; for then this fostering influence will be withdrawn. Such a temporary inflation of a particular industry must be harmful; for it involves a waste of capital and a misdirection of labour. The rapid growth of the manufacture of cotton goods in India may, however, have been largely, if not almost exclusively, due to other influences besides that of the currency. The evils resulting from the fluctuations in the relative value of the standards of different countries are, perhaps, never very strikingly apparent; but they may, nevertheless, be very real. One of the most serious disadvantages of our modern industrial system is that trades are constantly expanding and contracting; that the skill acquired in management and execution is constantly being rendered useless; and that capital sunk in moribund enterprises is constantly being lost. Everything which makes for stability without checking progress is an advantage. The adoption of a common international standard would tend to prevent the growth and decline of particular trades through the relative rise and fall in the prime cost of manufacture in different

tend to temporarily inflate and depress different industries is an almost unmixed evil.

countries, and it would not in the slightest degree put a drag on commercial development. Such a reform would, therefore, be highly desirable, unless, indeed, evils of a serious nature, such, for example, as the too great appreciation of the currency, would be bound to follow in its train.

Prices and production would be somewhat more stable if a common international standard were adopted.

It has also been seen that, when trade is inflated in one country by currency causes, there will be a corresponding though much less marked wave of increased production in countries not thus primarily affected; accompanied, however, by a slight fall in prices. When trade is depressed by an appreciation of the currency, the corresponding movement in countries not thus affected will be one of diminished production and slightly increased prices. Prices and production do, therefore, vary to a certain extent with any variation in the value of the standard of other countries. If two standards of value are equally likely to vary from inherent causes, then it follows that, if one of the two were universally adopted, prices and production would be everywhere somewhat more stable than if some countries adopted the one and some the other; because only the oscillations due to one of the two would then be felt. As far as this argument is concerned, an effective bimetallic system would only be preferable to a universal monometallic system in so far as it is inherently more stable. It is, however, clear that the adoption of a common standard of value would, in this respect, be advantageous; and also that every nation is affected by the standard in use in other countries.

As in all quantitative questions connected with the currency, when we endeavour to estimate the extent to which all these complex influences may be expected to be felt, we are landed in almost hopeless difficulties. Statistical inquiries give us the result of a hundred different causes, and there appears to be no way of disentangling the separate effects of each. We have seen reason to believe that the influence on prices and production at home, consequent on the variation in the value of the standards of foreign countries (other than the effects directly arising from the flow of the metals), is due to the way in which production is relatively inflated or depressed in these foreign countries by the relative depreciation or appreciation of their currencies. Those readers of Chapter XVII., who do not agree that a strong case has been made in favour of the belief that causes primarily affecting the currency have a considerable effect on internal trade, will naturally come to the conclusion that the changes in the condition of foreign currencies can have but very little effect on home trade. But, on the other hand, even if we do not go the length of considering that a rise in prices sets in motion a new order of influences "as beneficent as it is mighty,"¹ we may yet believe that a very material influence will be produced on the trade between two countries, and on their competition in neutral markets, when, in the one country, a drag is placed for a long time on commerce by an appreciation of the standard,

The extent of the evils here disclosed depends on the extent to which trade is inflated or depressed by currency causes.

¹ Tooke's "History of Prices," vol. vi. p. 229.

whilst, in the other country, trade is facilitated by a depreciation of the currency.

The argument of this chapter points to the advantages of a common international standard, without indicating what that standard should be.

The result of this long inquiry may be summarized as follows: The adoption of a universal standard will slightly lessen the disturbance of commerce due to the precious metals ousting other commodities from the flow of international trade. The existing diversity of standards increases the rapidity with which all the factors of production reach their normal condition in any country where prices are changing through currency causes; but this is a doubtful advantage, and one which would disappear either with universal gold monometallism or with effective bimetallism. A common international standard would both check the temporary variations in the relative price and production of different commodities, and, to a much lesser degree, would make the average price of all commodities more stable. Thus the whole argument of this chapter tells strongly in favour of the adoption of one universal standard of value for all countries; though when we come to the question as to what that standard should be, we get no guidance here, and must look to other considerations to settle that point.

Gold-using countries will not on the whole be benefited by a rise in the value of silver.

In conclusion, if I am asked whether a change in the ratio—a rise in the gold price of silver—will be beneficial to gold-using countries, I can only answer that, granting the correctness of my conclusions, it entirely depends on how that change is brought about. The ratio may alter in the direction indicated either by a fall in the value of gold,

or by a rise in the value of silver, or by a relative movement in the values of the two metals, one rising or falling more quickly than the other. If gold falls in value—that is, if gold prices rise—manufacturers in gold-using countries will be benefited; but whether we should consider this result as being for the well-being of the community in general will depend on the view taken of the arguments set forth in Chapters XVII. and XVIII. My opinion being that it would be better if gold prices were to fall much less rapidly than they have done in recent years, I should hold that any cause tending to decrease the value of gold—or rather to check its appreciation—would be beneficial, unless it tended to shake commercial confidence, or to produce too great or too sudden an effect on prices. On the other hand, if the ratio changes in consequence of a rapid rise in the value of silver, commerce will be checked in silver-using countries by the fall in silver prices; and some trades in gold-using countries will be stimulated thereby, whilst a greater number will be depressed. *I see, therefore, no net gain to gold-using countries to be obtained by forcing up the value of silver, unless it is a definite step in the direction of obtaining a steadier standard of value, or of minimizing the fluctuations in the rate of exchange.* And I would ask those who are advocating such a course to consider how the depression of trade in silver-using countries can be an advantage to us. The greater the effect of the appreciation of silver, the greater will be the

diminution of trade of silver-using countries, whether they are acting as our rivals or as our customers. In estimating the results on our commerce, of this depression in silver-using countries, we must decide which is the more important aspect of this branch of international trade ; and we must remember that it cannot on the whole be an advantage to us to cripple the commerce of other nations who are our customers rather than our rivals.

CONCLUSION.



CHAPTER XXIII.

RECAPITULATION AND CONCLUSIONS.

IN Chapter IX. a summary was given of the arguments relating to the choice of the bimetallic ratio. The ratio in the market at the time of the introduction of the system—the market ratio—and the ratio of $15\frac{1}{2}$ to 1—the low ratio—were taken as the extremes to be considered; and the choice between the two was discussed on the hypothesis that bimetallism is preferable to monometallism. The verdict was strongly in favour of the market ratio, though it was admitted that some arguments pointing to the advisability of adopting an intermediate ratio were worthy of consideration. In subsequent chapters, all the main arguments which have been advanced for and against the introduction of a system of bimetallism with the market ratio have, I believe, been set forth. The following is a brief recapitulation of the points discussed.

The main objections to market-ratio bimetallism, with the replies thereto, are:—

- (1) That it would be impossible to obtain the necessary international agreements. That may be

Recapitulation of the objections urged against bimetallism;

true, but it is no argument against trying to obtain them.

(2) That it would be very unwise to place our currency system at the mercy of foreign powers by entering into any international agreement. But a Bimetallic Union would influence the values of the metals everywhere alike; and, as regards the general level of prices, those nations who did not join such a union would be exactly as much "at its mercy" as those who did. The international agreement would presumably contain a clause giving a power of repudiation after due notice. Bimetallism would only be adopted after serious consideration; and a pledge not to hastily reverse a deliberately adopted policy would be the only bond fettering the action of a bimetallic country.

(3) That a fixed ratio of value between the metals cannot be maintained by the law. In reply, it is urged that the weight of authority is strongly against this view, and, moreover, if the system had to be abandoned, the dangers accompanying such a step may easily be exaggerated.

(4) That silver, on account of its weight, is an inconvenient metal for coinage. But, in reply, it is contended that, under a market-ratio system, there is no reason to believe that the total amount of silver in circulation would be increased; and it is urged that, in any case, with the aid of notes and token coinage, the inconvenience attending the use of the joint standard would not be at all serious.

(5) That to establish such a system would be an unfair interference with existing contracts. But it would be not a whit more unfair than the abandonment of bimetallism by the Latin Union, which no monometallist has ever yet called a dishonest act.

(6) It is urged that the position of England in the financial world is due to the soundness of her currency system. But, on the other hand, it is asserted that this is a mere speculation, not based on sound arguments, and that much more deep-seated causes have produced such prosperity as we have obtained.

The following are the arguments in favour of this system, together with the replies thereto:—

(1) That bimetallism, by tying gold and silver together, would diminish the variations in average prices whether due to causes affecting only one of the metals, or to the indirect effect of commerce between countries with different standards. In reply, it is stated that the result of recent investigations indicates that the steadying effect thus produced will not be very great.

(2) The Government of India has found itself in serious financial difficulties through the fall in the rupee; and bimetallism with a suitable ratio, though it would not restore things to their previous condition, would insure against further troubles in the future. In reply, it may be urged that these difficulties have already been nearly overcome by the monopoly-rupee system; and that gold monometallism, which it is intended to introduce into

and of the
arguments
in its
favour.

India, will remedy the evils complained of quite as effectively as bimetallism.

(3) That commerce between gold and silver-using countries is seriously hampered by the fluctuations in exchange; that the depreciation of silver has put industrial concerns in gold-using countries at a disadvantage in competing in all markets; that the existing diversity of standards increases the instability in the relative prices of different commodities, thus temporarily inflating or depressing particular trades in an injurious manner; and that these evils would be remedied with regard to *all* gold-using and silver-using countries by means of a powerful Bimetallic Union, even if all were not included in it. In reply, it is stated that these troubles, though no doubt they do exist, have been greatly exaggerated; that gold monometallic systems are rapidly being established throughout the commercial world; and that these difficulties will thus be overcome in so far as they affect commerce between nations adopting this common standard.

(4) That theoretical considerations show that we ought to adopt a system of currency which in times of commercial progress neither allows prices to rise, nor allows the price of the output per man per day to fall; that, with the silver standard, the average price of wholesale commodities has remained approximately steady; that, with the gold standard, the price of the output of labour has not varied greatly; and that, judging by the past, a mean

between the two would form a standard to which no objection could be raised on such theoretical grounds. Monometallists, on the other hand, contend that the fall in prices has been on the whole beneficial, and that the gold standard should, therefore, be maintained in the future. It might be added that it is very doubtful whether the joint standard would *permanently* diminish the tendency to falling prices; and, if it did so, that there is some doubt as to the advantages thus to be derived.

(5) Lastly, it is contended that, if bimetallism is not introduced, gold will be more and more used as the standard of value; that this will cause an increasing demand for that metal for a long time to come; that we cannot hope always to progress in the methods of economizing the use of the standard as rapidly as during the last half century; or, at all events, that this check on appreciation cannot be relied on in the future any more than in the past; and that the appreciation of the currency, resulting from the balance of these conflicting causes, is certain to produce very harmful effects in depressing trade. In reply, it is urged that the output of gold is increasing, and that this will prevent the undue appreciation of the standard.

Many facts point to the conclusion that the monetary condition of the world is at present in a state of unstable equilibrium. Russia and Japan are in the act of adopting the gold standard. The Indian currency system cannot remain for long in its present unsatisfactory condition; and though

Of the alternatives before us, the maintenance of both gold and silver mono-

metallic
systems is
the worst.

the Government of India apparently looks upon the change made in 1893 as a stepping-stone towards gold monometallism, there are, nevertheless, some high authorities who think that it will be necessary for that country to return to a silver standard. As to the United States, it is clear that all danger of a victory for the silver party is by no means at an end. We are evidently passing through a transition period; the monetary conditions of the future will, in all probability, differ widely from those we see round us at present; and it is doubtful with what system or systems bimetallism should be compared. Should the United States, or India, or any other great nation revert to silver monometallism, it is possible that gold-using countries might reap some benefits from the change; for the demand for gold would be diminished thereby, and the tendency for the gold standard to appreciate would thus be checked; but in other ways the results would be very harmful. If either India or any country which now has a gold standard were to adopt or drift into silver monometallism, then there would be an increase in the amount of goods made in gold-using countries and sold in silver-using countries, and *vice versa*. In a larger proportion of the trade of the world the freedom of intercourse would be hampered by fluctuations in the rate of exchange. And those evils, which are due to the way in which diversities of standards create an element of instability in the balance and burden of international indebtedness,

would be increased. To divide the world into two camps—a silver camp and a gold camp—would, in my opinion, be the worst of all the alternatives which lie before us.

Whatever may be the differences of opinion amongst currency reformers concerning other matters, they all agree that it is desirable to minimize the disturbance to trade, and the inconvenience felt by the Governments of silver-using countries, which result from the fluctuations in the rate of foreign exchanges; though the benefits thus to be derived are rated more highly by some than by others. This end can only be attained by the adoption of a common international standard of value. In searching for the best standard which can be adopted, we should, therefore, compare the merits of effective bimetallism and universal monometallism; for, even if a standard more perfect than either of these could be devised, it would at present be outside the limits of practical politics; having no organised party to advocate it. The movement in favour of gold monometallism has not as yet, I think, come to a standstill; and a monetary system in which gold plays an even more important part than it does at present is the most probable future with which to compare bimetallism. The general adoption of gold monometallism throughout the commercial world would, no doubt, be very advantageous in many respects. Such a movement would probably make the gold standard somewhat more stable; both because the indirect

Universal gold monometallism and bimetalism are the most probable alternatives.

effects of the variations in the value of silver would no longer be felt, and because the increase in the area covered by the gold standard would tend to diminish the size of the waves of disturbance due to the variation in many of the causes affecting the value of gold. At the same time all the evils due to the avoidable fluctuations in the rate of exchange would cease, and no inconvenience connected with the maintenance of international agreements would be felt. But, on the other hand, the increase in the demand for gold would probably cause the appreciation of the standard to continue with its depressing effects on trade. And it is this very fall in prices which is the origin of the existing widely felt temptation to adopt some new system of currency, merely for the purpose of alleviating the pressure of existing debts. There seems to be no chance of any serious consideration being given to the question whether it is possible to put a check on the appreciation of gold by other means than the adoption of bimetallism; and, unless the increase in the production of gold soon begins to have a material influence on the value of that metal, the revolt against existing currency arrangements may very possibly tend to increase rather than to subside. It is, consequently, not improbable that the movement in favour of gold may add to, rather than diminish, the risk of dangerous monetary revolutions.

But if market-ratio bimetallism were adopted, no injustice would be inflicted on any class; the

stability of the standard would be increased; the drag on trade, through the too rapid fall in prices, would diminish; and the system would be one which might, I conceive, endure for a very long period of time.

The above is an outline of the arguments to be considered in forming a judgment on this difficult question. They are in many respects evenly balanced. My own view is that, whatever course we adopt, we are stepping into a future for which the past gives us most inadequate guidance, but that, on the whole, the balance of probable benefits and evils is distinctly in favour of market-ratio bimetallism.

The balance is on the whole in favour of market-ratio bimetallism.

As to the exact ratio to be selected, that may not, within limits, be a matter of the highest importance; but it is vitally important to know with what objects this reform is demanded. Some arguments in favour of a ratio somewhat lower than the ratio in the market, which are not based on the desire for inflation, may fairly be weighed in the balance; but the difficulty which the Government of India would experience in adopting a ratio higher than 25 to 1 is the only one of these considerations which ought, as it appears to me, to carry much weight. No doubt it will be urged that France and the United States would never be parties to bimetallism with anything like the ratio now ruling the market, and that, if an attitude of resistance to all compromise is adopted, this will be practically equivalent to supporting monometallism. This may

No compromise on the question of the ratio should be made with the inflationists.

be so, but in considering the question of a compromise with those who desire to use bimetallism as an engine for raising prices, we have to weigh the strength of our objection to such a course against the strength of our desire to establish any form of bimetallism. As the evils of an artificial depreciation of the currency are abundantly clear, and as the choice between bimetallism and monometallism is not free from doubt, it appears to me that almost any compromise with those who advocate this reform on such grounds ought to be resisted.

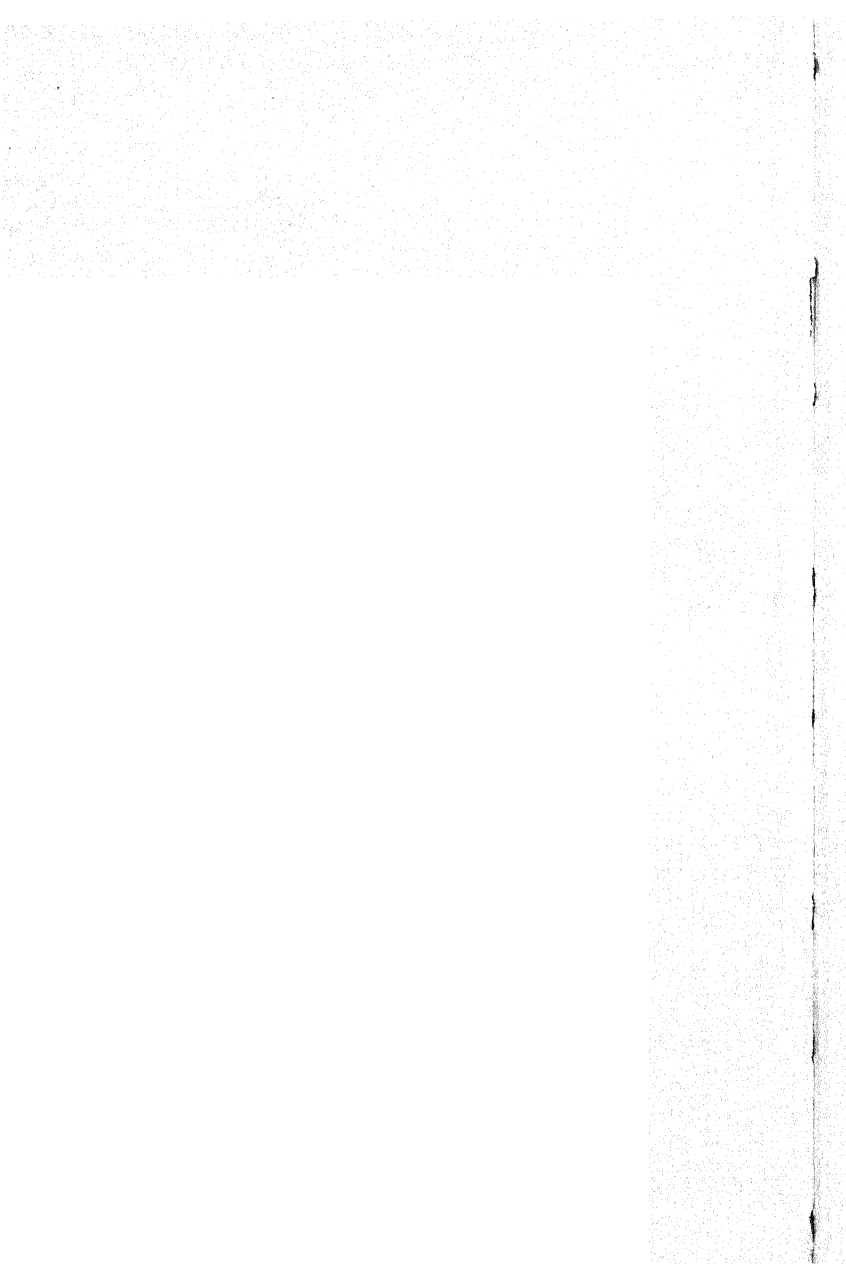
France and the United States should also be in favour of the market ratio.

The advocates of low-ratio bimetallism seem, moreover, to be utterly blind to the difficulties which will certainly spring up in their path. The monometallic party have hardly opened a serious defensive campaign in England; but when they do so, they will flood the country with orators who will tell the working classes that the main object of the bimetallic agitation is to increase the price of food and of all other commodities, which will be equivalent to a reduction in wages. Bimetallists, who adhere with determination to the low ratio, cannot deny this charge, and can only urge in reply that the revival of trade would be sufficient to make annual earnings rise more rapidly than prices. Even if this argument is sound, it will, I believe, be found quite impossible to persuade the working man that dear food will be a benefit to him. If France bars the way to the adoption of any ratio but that of $15\frac{1}{2}$ to 1, the British constituencies will prevent the adoption of that ratio

with equal determination. If, however, the electorates on the Continent and in America ever come to see that the increase in the value of their stocks of silver will not repay them for the evils resulting from inflation, then a more rational system of bimetallism may be adopted, a system which would at once dispose of the majority of the objections raised by monometallists.

I believe there are many bimetallists who object, as I do, to all currency reforms introduced for the purpose of artificially forcing up prices, and who yet keep silent for fear of causing a rupture in the bimetallic camp. When the tug of war comes, they will very probably find the inflationist section too strong for them in the councils of their party; at the last moment they may have to desert, and to join the monometallists in resisting a reform with which they have much sympathy. If they speak now, they may cause wiser opinions to prevail on their own side. This question of the ratio has to be fought out; and, until it is decided, probably no real advance can be made in the bimetallist cause; certainly no clear understanding can be established as to the objects to be striven for; and many will feel it quite impossible to decide whether or not to enrol themselves as advocates of the proposed reform.

The question of the ratio is a vital one.



APPENDIX.

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THE following tables are abridged from those given in the *Bimetallist* of February, 1897 :—

TABLE I.

THE WORLD'S PRODUCTION OF GOLD AND SILVER FROM 1493-1885.
[Calculated from Soetbeer's figures.]¹

YEARS.	WEIGHT PER ANNUM.		
	Gold, fine.	Silver, fine.	Proportion of gold to silver as 1 to—
	Ounces, troy.	Ounces, troy.	
1493-1520	186,470	1,511,050	8·1
1521-1544	230,194	2,899,930	12·6
1545-1560	273,596	10,017,940	36·6
1561-1580	220,195	9,628,925	43·9
1581-1600	237,267	13,467,635	57·2
1601-1620	273,918	13,596,235	49·6
1621-1640	266,845	12,654,240	47·4
1641-1660	281,955	11,776,545	41·8
1661-1680	297,709	10,834,550	36·4
1681-1700	346,094	10,992,085	31·7
1701-1720	412,163	11,432,540	27·7
1721-1740	613,422	13,863,080	22·6
1741-1760	791,211	17,140,611	21·7
1761-1780	675,665	20,985,591	31·5
1781-1800	571,948	23,261,779	49·4
1801-1810	571,562	28,775,858	50·7
1811-1820	367,957	17,385,756	47·2
1821-1830	457,045	14,807,005	32·4
1831-1840	652,292	19,175,868	29·4
1841-1850	1,760,502	25,090,342	14·2
1851-1855	6,410,325	28,488,598	4·4
1856-1860	6,485,863	30,252,829	4·7
1861-1865	5,949,583	35,401,973	5·9
1866-1870	6,270,086	43,051,583	6·9
1871-1875	5,591,014	63,317,014	11·3
1876-1880	5,543,111	78,775,602	14·2
1881-1885	4,794,755	92,003,944	19·2

¹ The whole of the figures, and also the proportions, are calculated from kilogrammes and marks as given in the "Appendix to the Final Report of the Gold and Silver Commission," pp. 146-148.

TABLE II.

THE WORLD'S PRODUCTION OF GOLD AND SILVER FROM 1873-1895.

[From Tables issued by the United States Mint.]

[Converted at £1 = \$5.]

Years.	Silver, fine.	Gold, fine.	Proportion of gold to silver as 1 to—
	Ounces, troy.	Ounces, troy.	
1873	63,267,000	4,654,000	13·6
1874	55,300,000	4,390,000	12·6
1875	62,262,000	4,717,000	13·2
1876	67,753,000	5,016,000	13·5
1877	62,680,000	5,512,000	11·4
1878	73,385,000	5,761,000	12·7
1879	74,383,000	5,262,000	14·2
1880	74,795,000	5,149,000	14·5
1881	79,021,000	4,984,000	15·9
1882	86,472,000	4,934,000	17·5
1883	89,175,000	4,615,000	19·4
1884	81,568,000	4,921,000	16·6
1885	91,610,000	5,246,000	17·5
1886	93,297,000	5,136,000	18·2
1887	96,124,000	5,117,000	18·8
1888	108,828,000	5,331,000	20·4
1889	120,214,000	5,974,000	20·2
1890	126,095,000	5,749,000	22·0
1891	137,171,000	6,320,000	21·2
1892	153,152,000	7,094,000	21·6
1893	165,473,000	7,618,000	21·7
1894	164,610,000	8,783,000	18·7
1895	169,180,000	9,689,000	17·5
Total	2,295,815,000	131,972,000	
Yearly average	99,818,000	5,738,000	17·4

TABLE III.
MR. SAUERBECK'S INDEX NUMBERS.

Years.	Index-number of 45 principal commodities.	Years.	Index-number of 45 principal commodities.
1867-1877 ...	100	1885 ...	72
1874 ...	102	1886 ...	69
1875 ...	96	1887 ...	68
1876 ...	95	1888 ...	70
1877 ...	94	1889 ...	72
1878 ...	87	1890 ...	72
1879 ...	83	1891 ...	72
1880 ...	88	1892 ...	68
1881 ...	85	1893 ...	68
1882 ...	84	1894 ...	63
1883 ...	82	1895 ...	62
1884 ...	76	1896 ...	61



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